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MASTECH®

MASTECH®

BUILD TO PRECISION



CATALOGUE 2019

Distributor

Официальный дистрибьютор в России



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2019



Chairman's Message

Mr Kai-Yin Ip, founder of Precision Mastech Enterprises was a true spirit from Hong Kong. His envisions for the electrical testing industry and business came alive whilst sitting at the Kowloon Pier in front of the Victoria Harbor.

The business started in a small and flat-planned industrial building where Mr. Ip and his founding team built the Mastech business from ground up and by 1998, our manufacturing facility focuses mainly on housing and plastic parts and cables and metal parts for both our injection workshop and metal workshop. With this business execution and expansion, Mastech soon had its foot-stamp on the world map and is well known for its quality and reliability.

With 30 years of technical knowledge alongside a group of young sales team, Mastech has developed a reputation for excellence:

- Excellence in providing Customer Service
- Excellence in providing Solution-based strategy to all our partners
- Excellence in Innovation in both our products and our solutions
- Excellence in building Long-term Partnerships
- Excellence in creating a Business-Friendly culture
- Excellence in genuine Cooperation

With the remodeling of the Mastech business model in 2010, it has now expanded its footsteps onto the world map with a 92,000 square feet factory in China since 2016, a 34,000 square feet office and warehouse set up in North & Central America, an office located in Mexico and a whopping 130,000 square feet office and warehouse in Spain.

These locations and upgraded facility in our engineering lab, automated production lines and SMT lines allow us to become the fastest, most efficient and best of all, the most results driven business partner in our industry.

This new business model allows all our partners to enjoy:

- Increase Lead Time (meaning decreased waiting time)
- Increased budget-spend on MOQ (meaning less pressure on minimum orders)
- Increased value on Costing (meaning decreased operating cost)
- Increased Post Sale Services (meaning partners are able to enjoy a seamless buying experience)

Mastech shall at all times adhere to all your needs and requirements, even at the most challenging of times.

Mastech shall continue to strive to advance our technologies and developments in these forever evolving times.

Mastech shall endure the ultimate test to sustain growth, superior performances and exceptional deliveries.

Come and experience the Mastech journey.



About Us

At MASTECH, we focus on providing the highest quality and innovative Measuring Instruments with the best service to our customers. Over more than 30 years we have been listening to our customers and developing MASTECH solutions to satisfy the market needs, based in a continuous improvement program, strong efforts in our R&D department and implementing the last technologies in our products.

Innovation, Technology, Leadership

Information, imagination and initiative are the key points of our innovation to meet new requirements and satisfy needs in the electrical market. We explore and research, developing ideas and technologies, always moving forward to contribute to progress.

We design products to make your life easier

With our rich product lines and continuous upgrades and improvement, we have built a full range of reliable Measuring Instruments directed towards a wide range of users, from DIY household use or educational institutions to professional electricians or construction sector and industry. This product range covers from Multimeters and Clamp Meters to Voltage Testers, Circuit Testers and all range of Environmental Testers.

At MASTECH, safety and quality is our top concern in product development. Our R&D and production lines are in strict compliance with International Electrotechnical Commission (IEC), and each product is manufactured and tested following International Safety and Environmental standards, with International certifications such as CE, ETL, UL or GS.

MASTECH Team

Our team always works aiming at two main areas:

- | | |
|----------------------------------|-------------------------|
| 1. Customers: | 2. Business |
| - Customer-focused. | - Brand |
| - Post-Sales service | - Innovation |
| - Efficient Logistics | - Technology |
| - Professional Technical support | - Teamwork |
| | - Delivery |
| | - Social Responsibility |



MGL Group

Since 2018, MASTECH is incorporated into MGL, a Worldwide Group with facilities in 3 continents and presence in a large number of countries all around the world, from USA, Mexico or Peru; United Kingdom, Spain, or Germany; Algeria, South Africa or Tanzania to India, Japan or Korea.

Specialized in the electrical field, MGL covers different segments, from DIY test and measuring, automotive electrical diagnostic or industrial and professional testing to power and energy saving solutions. Thus, MGL counts with more than 800 employees around the world, who are highly qualified professionals and specialized in the sector.

MGL is formed globally. Our teams are from all around the world and our customers are based globally. With this global vision, our business strategy is based on strategic analysis of each individual market, allowing us to interact with proximity and adapt to each area. Our proposals are always focused to fulfil all requirements, and our solutions are guaranteed to create added value services.

Thinking globally, acting locally.

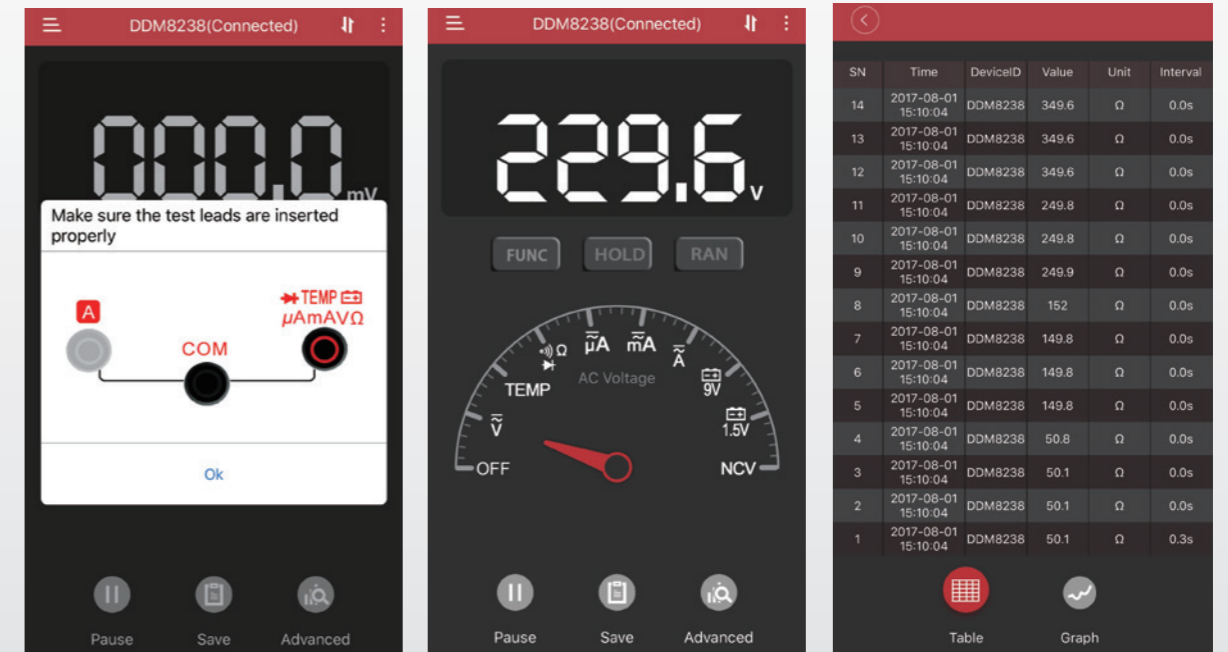


Partners around the world



ANDORRA	CZECH REPUBLIC	JAPAN	NORTHERN IRELAND	SRI LANKA
ALGERIA	DENMARK	JORDAN	NORWAY	SWEDEN
ARGENTINA	DUBAI	KAZAKSTAN	PAKISTAN	SWITZERLAND
AUSTRALIA	ECUADOR	KENYA	PALESTINE	SYRIA
AUSTRIA	EGYPT	KOREA	PANAMA	THAILAND
AZERBAIJAN	FINLAND	LEBANON	PARAGUAY	TURKEY
BAHRAIN	FRANCE	LITHUANIA	PERU	U.A.E.
BANGLADESH	GERMANY	MACEDONIA	PHILIPPINES	U.K.
BELGIUM	GREECE	MALAYSIA	POLAND	U.S.A
BRAZIL	GUATEMALA	MAURITIUS	PORTUGAL	UKRAINE
BULGARIA	HOLLAND	MEXICO	QATAR	URUGUAY
CANADA	HUNGARY	MOLDOVA	ROMANIA	VIETNAM
CHILE	INDIA	MONGOLIA	RUSSIA	
CHINA	INDONESIA	MOROCCO	SAUDI ARABIA	
COLOMBIA	IRAN	MYANMAR	SINGAPORE	
CONGO	IRAQ	NEPAL	SLOVENIA	
COSTA RICA	ISRAEL	NEW ZEALAND	SOUTH AFRICA	
CYPRUS	ITALY	NIGERIA	SPAIN	

New Technologies



SMARTPHONE CONNECTIVITY

Today the Smartphone has become our global management device. We use it for all aspects of our life, to be connected to the Internet and in touch with our contacts, store all kind of data, share documents and experiences, etc. In short, it is the platform to be connected with the world.

This trend also affects measuring instruments. Increasingly, instruments with connectivity are becoming more important, functioning as a global system rather than independent or isolated devices.

For this reason, and in order to offer to the market instruments with this technology, we have developed a range of instruments with the ability to connect to Smartphones, using an app for both Android platform and iOS platform, totally free and available in the most usual app stores.

Connecting our instruments with the Smartphone cannot be easier; just by pressing the "LINK" button, everything is already done.

This technology offers multiple benefits and multiplies the functionality and versatility of measuring instruments:

- Display on the Smartphone. It makes possible to see the display of the measuring instrument simultaneously and in real time on the Smartphone. This allows us to perform readings remotely through the Smartphone, useful -for example- when the instrument is in a place difficult to access or when two users want to read the display at the same time.
- No mistakes with the test leads. A common problem is to select a function in the instrument and connect the test leads in the wrong sockets. This may damage the instrument, as in the case of measuring voltage but selecting current, which causes the fuse to break. Our app, every time you select a function, shows you clearly where to connect the test leads.
- Data logging. There is no longer need to provide internal memory for measuring instruments, and then send the data to the Smartphone or the computer through complex procedures using cables and software. The app performs data logging, using the memory of the Smartphone, and allowing info to be displayed on the screen, either in table format or as a graphic. In addition, we generate files that we can share with any partner or client immediately through the Internet.



New Technologies

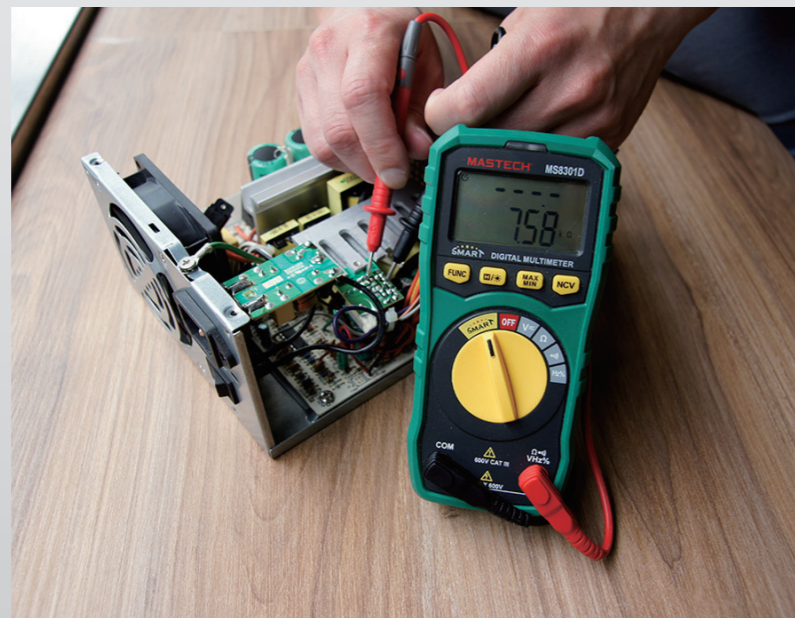
SMART SMART

SMART is a new technology in the field of electrical measuring instruments. The instruments equipped with this technology are able to recognize by themselves the electrical parameter that is being measured, without the need for the user to indicate it on the equipment by the rotary knob.

What are the main benefits of this technology?

-Time saving. Often the users of measuring equipments carry out a large number of readings. With SMART technology, we avoid wasting time by changing the position of the rotary knob. And in the easiest way, just connect the test leads and measure, that's all.

-No mistakes. It is common to make mistakes in the use of the measuring instrument. Whether due to lack of attention, or because the user is not an expert, a function that does not correspond to what we are measuring is wrongly selected on the rotary knob. What causes this? Misunderstanding of measurements and even damage to measuring equipment. SMART avoids all this, since with this technology these errors are impossible to make.



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Fast Selection Charts

EARTH RESISTANCE TESTERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<p>Earth clamp meter</p>	<p>3 wires method</p>	<p>4 wires method. Soil resistivity</p>	<p>2 clamps method</p>
Model	MS2301	MS2302	MS2306	MS2308
Page	28	29	30	30
Safety Rating	▶ CAT III 150V	▶ CAT III 300V		
Resistance	0.01Ω~1200Ω	0.01Ω~4000Ω	0.02Ω~20kΩ	0.02Ω~300kΩ
Measurement Voltage		AC 200V	AC 20V/48V DC 20V	AC 20V/48V DC 20V
Sensing & inducing current transformer				•
Back light		•	•	•
Certificate		CE/ETL	CE/ETL	CE/ETL

PAT TESTERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<p>U.K. socket</p>	<p>U.S. socket</p>	<p>E.U. socket</p>	<p>QWERTY keyboard. U.K. socket</p>	<p>QWERTY keyboard. U.S. socket</p>	<p>QWERTY keyboard. E.U. socket</p>
Model	MS5911	MS5911A	MS5911D	MS5922E	MS5922A	MS5922D
Page	37	37	37	38	38	38
Safety Rating	▶ CAT II 300V	▶ CAT II 300V	▶ CAT II 300V	▶ CAT II 300V	▶ CAT II 300V	▶ CAT II 300V
Grounding	20Ω	20Ω	20Ω	20Ω	20Ω	20Ω
Insulation Resistance	20MΩ	20MΩ	20MΩ	20MΩ	20MΩ	20MΩ
leakage current	10.5mA	10.5mA	10.5mA	10.5mA	10.5mA	10.5mA
Cord Test	•	•	•	•	•	•
Polarity Test	•	•	•	•	•	•
Power Socket Test	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•
Backlight	•	•	•	•	•	•
Data logging	300 groups	300 groups	300 groups	300 groups	300 groups	300 groups
Built-in Keyboard				•	•	•
Certificate	CE		CE	CE		CE

INSULATION RESISTANCE TESTERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<p>Entry level 1kV</p>	<p>1kV</p>	<p>2.5kV</p>	<p>5kV</p>
Model	MS5201	MS5203	MS5205	MS5215
Page	32	33	36	34
Safety Rating	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT III 1000V ▶ CAT IV 600V	▶ CAT III 1000V ▶ CAT IV 600V	▶ CAT III 1000V ▶ CAT IV 600V
Insulation Resistance	0.01MΩ~2GΩ	0.01MΩ~10GΩ	0.01MΩ~100GΩ	0.01MΩ~5TΩ
Output Voltage	1kV DC	1kV DC	2.5kV DC	5kV DC
Leakage Current test				1nA~3mA
Continuity Test		0.01Ω~200Ω (1mA)	0.01Ω~200Ω (1mA)	
Measurement Voltage	DC 1000V AC 700V	DC 1000V AC 750V	DC 1000V AC 750V	DC 1000V AC 750V
Short Current	1.8mA	1.8mA	3mA	3mA
Temperature Test				-10~70°C
Back Light		•	•	•
Interface				USB
Certificate		CE/ETL	CE/ETL	CE/ETL

Fast Selection Charts

DIGITAL MULTIMETERS								
	POCKET				MANUAL RANGE ESSENTIALS			
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 								
Model	M300C	M320	MS8333A	MS8223A	MAS830	MAS830L	MAS838	MS8238
Page	40	40	41	42	43	43	44	45
Safety Rating	CAT III 300V	CAT II 600V CAT III 300V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V
Display Counts	2000	4000	6000	2000	2000	2000	2000	2000
Autoranging		•	•	•				
Auto Power Off		•	•	•				
True RMS			•					
DC Voltage	300V	600V	600V	600V	600V	600V	600V	600V
AC Voltage	300V	600V	600V	600V	600V	600V	600V	600V
DC Current	200mA	400mA	600mA	200mA	10A	10A	10A	10A
AC Current		400mA	600mA	200mA				
Resistance	2MΩ	40MΩ	60MΩ	20MΩ	2MΩ	2MΩ	2MΩ	2MΩ
Capacitance		100μF	600μF					
Frequency		100kHz	10kHz					
Duty Cycle			•					
Type K Temperature							-20~1000°C	
Battery Test			•					•
Diode	•	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•
Display Backlight			•			•		
Work Light				•				
Data Hold		•	•	•	•	•	•	•
NCV			•	•				
Inductance								
hFE Transistor								
Dual Display								
MAX				•				
MAX/MIN								
MAX/MIN/AVG								
Relative Measurement								
Peak Measurement								
DWELL Test								
TACH Test								
Logic Level Test				•				
Retractable Tip								
Double Molding				•				
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	

DIGITAL MULTIMETERS								
	MANUAL RANGE ADVANCED		MANUAL RANGE MASTER				AUTO RANGE ESSENTIALS	
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 								
Model	MS8233B	MS8233C	MY70	MY74	MY75	MS8269	MS8233D	MS8233E
Page	46	46	47	47	48	49	50	50
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT II 1000V CAT III 600V	CAT II 600V	CAT III 600V
Display Counts	2000	2000	2000	2000	20000	20000	2000	2000
Autoranging							•	•
Auto Power Off			•	•	•	•	•	•
True RMS								
DC Voltage	600V	600V	600V	600V	600V	1000V	600V	600V
AC Voltage	600V	600V	600V	600V	600V	750V	600V	600V
DC Current	10A	10A	10A	10A	10A	10A	10A	10A
AC Current			10A	10A	10A	10A	10A	10A
Resistance	2MΩ	2MΩ	200MΩ	200MΩ	200MΩ	20MΩ	20MΩ	20MΩ
Capacitance				100μF	100μF	200μF		
Frequency				20kHz	20kHz		20kHz	
Duty Cycle								
Type K Temperature		-20~1000°C -4~1832°F		-20~1000°C		-20~1000°C		-20~1000°C -4~1832°F
Battery Test								
Diode	•	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•
Display Backlight	•	•					•	•
Work Light								
Data Hold	•	•	•	•	•		•	•
NCV	•	•				•	•	•
Inductance						20H		
hFE Transistor			•	•		•		
Dual Display								
MAX							•	•
MAX/MIN								
MAX/MIN/AVG								
Relative Measurement								
Peak Measurement								
DWELL Test								
TACH Test								
Interface								
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL			CE/ETL

Fast Selection Charts

DIGITAL MULTIMETERS								
	AUTO RANGE ADVANCED				AUTO RANGE MASTER			
	Capacitance. Frequency. Temperature	SMART	Industrial multimeter	Industrial multimeter. Bar graph.	SMARTPHONE	SMARTPHONE	Industrial multimeter. TRMS.	TRMS. USB.
Model	MS8239C	MS8301D	MS8250A	MS8251A	MS8238H	MS8361D	MS8251B	MS8250D
Page	51	52	53	54	55	56	57	58
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 1000V CAT IV 600V	CAT III 600V	CAT III 600V	CAT III 1000V CAT IV 600V	CAT III 1000V CAT IV 600V
Display Counts	4000	6000	4000	6600	4000	4000	6600	6600
Autoranging	•	•	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•	•	•
True RMS	•	•	•	•	•	•	•	•
DC Voltage	600V	600V	600V	1000V	600V	600V	1000V	1000V
AC Voltage	600V	600V	600V	1000V	600V	600V	1000V	1000V
DC Current	10A		10A	10A	10A	10A	10A	10A
AC Current	10A		10A	10A	10A	10A	10A	10A
Resistance	40MΩ	10MΩ	40MΩ	66MΩ	40MΩ	40MΩ	66MΩ	66MΩ
Capacitance	100μF		100μF	66mF		100mF	66mF	66mF
Frequency	10MHz	3kHz	5MHz	66MHz		10MHz	66MHz	66MHz
Duty Cycle	•	•	•	•		•	•	•
Type K Temperature	-20~1000°C -4~1832°F			0~1000°C 32~1832°F	-20~1000°C -4~1832°F			0~1000°C 32~1832°F
Battery Test					•			
Diode	•		•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•
Display Backlight	•	•	•	•		•	•	•
Work Light								
Data Hold	•	•	•	•	•	•	•	•
NCV		•	•	•	•	•	•	•
Inductance								
hFE Transistor						•		
Dual Display		•		•			•	•
MAX								
MAX/MIN		•		•			•	•
MAX/MIN/AVG								
Relative Measurement			•	•		•	•	•
Low Impedance							•	
Bar Graph				•			•	•
TACH Test								
Interface					Wireless	Wireless		
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL

DIGITAL MULTIMETERS						
	SPECIAL APPLICATION					
	Environmental functions	Environmental functions	Automotive	Cable Tracker	Insulation test. SMARTPHONE	Insulation Test
Model	MS8209	MS8229	MS8239D	MS8236	MS5206	MS5208
Page	59	60	61	62	63	64
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 1000V	CAT III 1000V CAT IV 600V
Display Counts	4000	4000	2000	2000	6600	6600
Autoranging	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•
True RMS	•	•	•	•	•	•
DC Voltage	600V	1000V	600V	600V	1000V	1000V
AC Voltage	600V	750V	600V	600V	660V	750V
DC Current	10A	10A	10A	10A		400mA
AC Current	10A	10A	10A	10A		400mA
Resistance	40MΩ	40MΩ	20MΩ	20MΩ	200MΩ	60MΩ
Capacitance	200μF	100μF				60mF
Frequency	200kHz	200kHz				10kHz
Duty Cycle	•					
Type K Temperature	-20~1000°C	-20~1000°C -4~1832°F				-30~1300°C -22~2372°F
Diode	•	•	•	•		•
Continuity	•	•	•	•		•
Display Backlight	•	•	•	•	•	•
Work Light						
Data Hold	•	•	•	•		•
NCV				•		
Inductance						
hFE Transistor						
MAX			•	•		
MAX/MIN					•	
MAX/MIN/AVG						•
Relative Measurement	•					•
Peak Measurement						
Low Pass Filter						•
Insulation Test					1000V/10GΩ	1000V/2GΩ
DAR / PI					•	•
Relative Humidity	30~90%	20~95%				
Sound level	35~100dB	40~100dB				
Luminosity	40000Lux	4000/40000Lux				
Infrared Temperature						
Environment Temperature		0~40°C 32~104°F				
Cable Check					RJ11/RJ45/Tone	
Sound & Light Warning		•				
Data Logging						100 Groups
Interface					Wireless	
DWELL Test			•			
TACH Test			•			
Certificate		CE/ETL	CE/ETL		CE/ETL	CE/ETL

Fast Selection Charts

DIGITAL MULTIMETERS			
	BENCH TYPE		
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<p>22,000 Counts</p>	<p>Multifunction</p>	<p>53,000 Counts</p>
Model	MS6100	MS8040	MS8050
Page	65	66	68
Safety Rating		CAT II 1000V	CAT II 1000V
Display Counts	22000	22000	53000
Autoranging	•	•	•
Auto Power Off		•	•
True RMS		•	•
DC Voltage		1000V	1000V
AC Voltage		750V	1000V
DC Current		10A	10A
AC Current		10A	10A
Resistance		200MΩ	50MΩ
Capacitance		200mF	5mF
Frequency	1300MHz		
Logic Frequency		220MHz	2MHz
Linear Frequency		100kHz	200kHz
Duty Cycle		•	•
OSC. Out	10MHz		
Type K Temperature		-30~1300°C	
Diode		•	•
hFE Transistor			
Continuity		•	•
Backlight		•	•
Data Hold	•	•	•
MAX/MIN/AVG		MAX/MIN	•
Relative Measurement	•	•	•
Peak Measurement		•	
Low Pass Filter	•	•	
Bar Graph		•	
DC Current (For Clamp)		220/2200A	
AC Current (For Clamp)		220/2200A	
ADP measurement			
Data Logging			30 Groups
Analysis Software			•
Interface		USB	USB
Certificate	CE/ETL	CE/ETL	

DIGITAL CLAMP METERS							
	AC CURRENT ESSENTIALS						
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<p>SMART</p>	<p>400A</p>	<p>600A Temperature</p>	<p>1,000A 50mm jaw</p>	<p>1,000A Temperature</p>	<p>1,000A Frequency</p>	<p>2,000A 55mm jaw</p>
Model	MS2033A	MS2030	MS2030B	M266	M266C	M266F	MS2000G
Page	71	72	72	73	73	73	74
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT II 1000V CAT III 600V	CAT II 1000V CAT III 600V	CAT II 1000V CAT III 600V	CAT II 1000V
Display Counts	6000	2000	4000	2000	2000	2000	2000
Jaw Size	Φ26mm 1.0"	Φ28mm 1.1"	Φ28mm 1.1"	Φ50mm 2.0"	Φ50mm 2.0"	Φ50mm 2.0"	Φ55mm 2.2"
Autoranging	•		•				
Auto Power Off	•		•				
True RMS							
DC Voltage	600V	600V	600V	1000V	1000V	1000V	1000V
AC Voltage	600V	600V	600V	750V	750V	750V	750V
DC Current							
AC Current	600A	400A	600A	1000A	1000A	1000A	2000A
Inrush Current							
Resistance	10MΩ	2kΩ	40MΩ	20kΩ	2MΩ	2MΩ	2MΩ
Capacitance			100μF				
Frequency	3kHz		10kHz			2kHz	20kHz
Duty Cycle	•		•				
Type K Temperature			-20~1000°C -4~1832°F		0~750°C 32~1382°F		0~750°C
Diode		•	•			•	•
Continuity	•	•	•	•	•	•	•
Display Backlight	•		•				•
Work Light			•				
Data Hold	•	•	•	•	•	•	•
NCV							
MAX/MIN	•						
Relative Measurement							
Bar Graph							
Insulation Test				2000MΩ	2000MΩ	2000MΩ	
DC Current (From Plug)							
Low Pass Filter							
Low Impedance							
Dual Display							
Infrared Temperature							
Interface							
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL		CE/ETL	

Fast Selection Charts

DIGITAL CLAMP METERS						
	AC CURRENT ADVANCED		AC CURRENT MASTER			AC/DC CURRENT ESSENTIALS
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 						
Model	MS2009A	MS2009C	MS2028A	MS2025A	MS2025C	MS2101
Page	75	75	78	76	76	79
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 1000V CAT IV 600V	CAT III 1000V CAT IV 600V	CAT II 1000V CAT III 600V
Display Counts	2000	6000	2000	6000	6600	4000
Jaw Size	Φ26mm 1.0"	Φ26mm 1.0"	Φ26mm 1.0"	Φ40mm 1.6"	Φ40mm 1.6"	Φ42mm 1.7"
Autoranging	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•
True RMS			•	•	•	
DC Voltage	600V	600V	600V	1000V	1000V	1000V
AC Voltage	600V	600V	600V	750V	750V	750V
DC Current						1000A
AC Current	600A	600A	600A	1000A	1000A	1000A
Inrush Current						
Resistance	20MΩ	60MΩ	20MΩ	60MΩ	66MΩ	40MΩ
Capacitance		60mF		100mF	66mF	40μF
Frequency		10MHz		10MHz	66MHz	100kHz
Duty Cycle		•		•	•	•
Type K Temperature		-20~1000°C -4~1832°F		-20~1000°C -4~1832°F		-40~750°C
Diode	•	•	•	•	•	•
Continuity	•	•	•	•	•	•
Display Backlight	•	•	•	•	•	
Work Light	•	•	•	•	•	
Data Hold	•	•	•	•	•	•
NCV	•	•		•	•	
MAX/MIN	Max		Max	•	•	
Relative Measurement				•	•	•
Bar Graph					•	
Insulation Test						
DC Current (From Plug)						
Low Pass Filter						
Low Impedance						
Dual Display						
Infrared Temperature					•	
Interface						
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	

DIGITAL CLAMP METERS							
	AC/DC CURRENT ADVANCED			AC/DC CURRENT MASTER		LEAKAGE	
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 							
Model	MS2128A	MS2109A	MS2160	MS2128	MS2125A	MS2006B	MS2016A
Page	80	81	82	83	84	85	86
Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 1000V CAT IV 600V	CAT III 600V	CAT III 600V
Display Counts	4000	6000	4000	6600	6000	2000	4000
Jaw Size	Φ26mm 1.0"	Φ26mm 1.0"	Φ24mm 0.9"	Φ26mm 1.0"	Φ40mm 1.6"	Φ31mm 1.2"	Φ30mm 1.2"
Autoranging	•	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•		•
True RMS				•	•		•
DC Voltage	600V	600V	600V	600V	1000V		600V
AC Voltage	600V	600V	600V	600V	750V		600V
DC Current	600A	600A	80A	600A	1000A		
AC Current	600A	600A	80A	600A	1000A	60A	150A
Inrush Current				600A	1000A		
Resistance	40MΩ	60MΩ	40MΩ	66MΩ	60MΩ		40MΩ
Capacitance	4mF	4mF	40mF	66mF	100mF		40mF
Frequency	10kHz	10MHz	10MHz	10kHz	10MHz		
Duty Cycle	•	•	•	•	•		
Type K Temperature		-20~1000°C -4~1832°F	-20~1000°C -4~1832°F				20~1000°C -4~1832°F
Diode	•	•	•	•	•		•
Continuity	•	•	•	•	•		•
Display Backlight	•	•	•	•	•		
Work Light	•	•	•	•	•		
Data Hold	•	•	•	•	•	•	•
NCV		•	•		•		
MAX/MIN	•	•		•	•		•
Relative Measurement	•	•			•		
Bar Graph	•						
Insulation Test							
DC Current (From Plug)							
Low Pass Filter							•
Low Impedance							
Dual Display							
Infrared Temperature							
Interface							
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL		CE/ETL

DIGITAL CLAMP METERS

	POWER			SPECIAL APPLICATION		
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 						
	SMARTPHONE	Three phase. Active energy.	Three Phase. Harmonics.	Open jaw	1,000 AC/DC	400A AC
Model	MS2225A	MS2203	MS2205	MS2601	MS3300	MS3302
Page	88	87	87	90	91	91
Safety Rating	CAT III 1000V	CAT III 600V	CAT III 600V	CAT III 600V	CAT II 600V	CAT II 600V
Display Counts	6000	9999	6000	6000		
Jaw Size	Φ40mm 1.6"	Φ50mm 2.0"	Φ50mm 2.0"	Φ12mm 0.5"	Φ55mm 2.2"	Φ28mm 1.1"
Autoranging	•	•	•	•		
Auto Power Off	•		•	•		
True RMS	•	•	•		•	
DC Voltage	1000V			600V		
AC Voltage	750V	600V	600V	600V		
DC Current					1000A	
AC Current	1000A	1000A	1000A	200A	1000A	400A
Inrush Current	1000A					
Resistance	60MΩ			60MΩ		
Capacitance	100mF	1kHz	1kHz	60mF		
Frequency	10MHz			60MHz		
Duty Cycle	•			•		
Type K Temperature				-20~400°C -4~750°F		
Diode	•	•	•	•		
Continuity	•			•		
Display Backlight	•	•	•	•		
Work Light	•			•		
Data Hold	•			•		
NCV	•			•		
MAX/MIN	•	•				
Relative Measurement	•					
Active Power		600kW	600kW			
Apparent Power	750kW	600kVA	600kVA			
Reactive Power	750kVA	600kVAr	600kVAr			
Active Energy	750kVAr	0.3~1	0.3~1			
Power Factor	0.3~1	9999Wh				
Dual Display	45~65Hz		45~65Hz			
Harmonic Measurement		28 Groups	100 Groups			
Data Logging						
Interface	Wireless	RS232	RS232			
Certificate	CE/ETL			CE/ETL		

LINE SPLITTERS

	U.K	U.S	E.U
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 			
Model	MS922E	MS922A	MS922D
Page	92	92	92
Safety Rating	▶ CAT II 600V	▶ CAT II 600V	▶ CAT II 600V
AC Voltage	250V	125V	250V
AC Current	15A	15A	15A
Frequency	50~60Hz	50~60Hz	50~60Hz
Feature	<ul style="list-style-type: none"> -Allows for easy AC Current measurements -Using a Clamp meter on 2 or 3 Wire Power Cords -Provides the Ability to Safely Measure Current without the need to cut or separate conductors -Separates the Hot/Live conductor from the Neutral and Ground -Voltage check sockets for easy power calculations 		
Style	UK	US	EU
Certificate		ETL	

VOLTAGE TESTERS

	Adjustable sensitivity + Work Light	Household	Industrial	Adjustable sensitivity	Metal detection	Work Light	IR temperature	400V	RCD test
<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 									
Model	MS8916A	MS8900C	MS8900A	MS8902A	MS8902B	MS8907	MS6580B	MS8922A	MS8922B
Page	94	95	95	96	96	97	98	99	99
Safety Rating	▶ CAT IV 1000V	▶ CAT III 600V	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT II 1000V ▶ CAT III 600V	▶ CAT III 400V	▶ CAT III 400V
Non Contact Voltage	24~1000V	100~240V	90~1000V	12~1000V	20~1000V	50~1000V	12~1000V		
Contact Voltage								400V	400V
Frequency	50~60Hz	50~60Hz	50~60Hz	50~500Hz	50~500Hz	50~60Hz	50~60Hz	50~60Hz	50~60Hz
Laser Pointer	•								
Metal Detecting					<20mm				
RCD Test									•
Work Light	•					•	•		
Sound & Light	•	•	•	•	•	•	•		
Auto Power Off	•			•	•	•	•		
Sensitivity adjustment	•			•	•		•		
Infrared temperature							-20~330°C -4~626°F		
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL

Fast Selection Charts

WIRE TESTERS AND TRACKERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<i>RJ45</i> 	<i>RJ45 + coaxial</i> 	<i>RJ11 + power</i> 	<i>Multi-Function</i> 	<i>Cable locator</i>
Model	MS6811	MS6810	MS6812A	MS6813	MS6818
Page	101	101	102	103	104
Safety Rating					▶ CAT III 300V
Auto Ranging					•
DC Voltage					12~400V
AC Voltage					12~400V
Frequency			300kHz	300kHz	125kHz
Sensitivity Adjustable			•	•	•
Electric Wire	•		•	•	•
Coaxial Cable (BNC)		•		•	
Network Cable		•		•	
Telephone Wire			•	•	
Backlight	•				•
Worklight					•
Sound & light instructions			•	•	•
Certificate	CE/ETL	CE/ETL		CE/ETL	CE/ETL

SOCKET TESTERS AND CIRCUIT BREAKER FINDERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<i>E.U.</i> 	<i>U.K.</i> 	<i>U.S. GFCI</i> 	<i>E.U.</i> 	<i>U.K.</i> 	<i>U.S. GFCI</i>
Model	MS5902RTD	MS5902RTE	MS5902RTF	MS5905RTD	MS5905RTE	MS5905RTB
Page	108	108	108	109	109	109
Safety Rating	▶ CAT II 600V	▶ CAT II 600V	▶ CAT II 600V	▶ CAT II 600V	▶ CAT II 600V	▶ CAT II 600V
AC Voltage	230V	230V	120V	230V	230V	125V
Socket Test	•	•	•	•	•	•
GFCI			•			•
Work Light	•	•				
NCV				•	•	•
Buzzer and LED Instruction	•	•	•	•	•	•
Certificate	CE/ETL	CE/ETL		CE/ETL	CE/ETL	

SOCKET TESTERS AND CIRCUIT BREAKER FINDERS

<ul style="list-style-type: none"> ▶ CAT II ▶ CAT III ▶ CAT IV 	<i>E.U.</i> 	<i>U.K.</i> 	<i>U.S.</i> 	<i>U.S. GFCI</i>
Model	MS6860D	MS6860E	MS112	MS102
Page	106	106	107	107
Safety Rating	▶ CAT II 230V	▶ CAT II 230V	▶ CAT II 125V	▶ CAT II 125V
AC Voltage	230V	230V	125V	125V
Socket Test	•	•	•	•
GFCI				•
RCD				
Work Light				
NCV				
Buzzer and LED Instruction	•	•	•	•
Certificate	CE/ETL	CE/ETL	ETL	ETL

IR THERMOMETERS

	<i>Infrared camera</i> 	<i>Body-forehead</i> 	<i>500°C</i> 	<i>800°C</i> 	<i>800°C, K type</i> 	<i>30:1, K type</i>
Model	MS6561	MS6518	MS6522B	MS6531B	MS6531C	MS6541
Page	112	111	114	115	116	117
Color Display				•	•	
IRT Temperature	-20~400°C -4~752°F	32~42°C 89~108°F	-20~500°C -4~932°F	-40~800°C -40~1472°F	-40~800°C -40~1472°F	-50~760°C -58~1400°F
Type K Temperature				-40~1080°C -40~1976°F	-40~1080°C -40~1976°F	-50~300°C -58~572°F
Distance to Spot(D:S)	30:1		10:1	12:1	12:1	30:1
Emissivity	0.1~0.99	0.98	0.95	0.1~0.99	0.1~0.99	0.1~0.99
MAX/MIN/AVG/DIF			MAX/MIN/ AVG	•	•	•
Data Logging		10 groups			20 groups	100 groups
Backlight		•	•	•	•	•
Data hold		•	•	•	•	•
Interface	USB/MicroSD card					
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL

Fast Selection Charts

DIGITAL THERMOMETERS

	K Type	K.J.T.E Type	Dual Channel	Data Logging	Dual Channel Data Logging	Humidity	Humidity Data Logging
Model	MS6500	MS6511	MS6512	MS6513	MS6514	MS6508	MS6505
Page	118	119	119	120	120	121	122
Thermocouple Type	K	K.J.T.E	K.J.T.E	K.J.T.E. R.S.N	K.J.T.E. R.S.N		
Temperature	-50~750°C -58~1382°F	-200~1372°C -328~2501°F	-200~1372°C -328~2501°F	-200~1372°C -328~2501°F	-200~1372°C -328~2501°F	-20~60°C -4~140°F	-20~60°C -4~140°F
Injection Method	Single	Single	Dual	Single	Dual		
Channel		TC	T1/T2/T1-T2	TC	T1/T2/T1-T2		
Relative Humidity						0~100%	0~100%
Update Rate	500mS					400mS	
Clock							•
MAX/MIN/AVG/DIF		•	•	•	•	MAX/MIN	MAX/MIN
Date Logging				1000 groups	1000 groups	100 groups	16300 groups
Backlight						•	•
Date Hold	•	•	•	•	•	•	•
Interface				USB	USB		RS232
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL

ANEMOMETERS

	40 m/s	Humidity	SMARTPHONE
Model	MS6252A	MS6252B	MS6252D
Page	126	126	126
m/s (meter per second)	0.8~40 m/s	0.8~40 m/s	0.8~40 m/s
km/h (kilometer per hour)	2.88~144 km/h	2.88~144 km/h	2.88~144 km/h
ft/s (feet per second)	2.62~131.2 ft/s	2.62~131.2 ft/s	2.62~131.2 ft/s
Knots (nautical miles per hour)	1.6~77.70 Knots	1.6~77.70 Knots	1.6~77.70 Knots
mile/h (mile per hour)	1.8~90.00 mile/h	1.8~90.00 mile/h	1.8~90.00 mile/h
ft/m (feet per minute)	157.5~7874 ft/m	157.5~7874 ft/m	157.5~7874 ft/m
Temperature		-10~60°C	-10~60°C
Relative Humidity		20~80%RH	20~80%RH
Ambient		•	•
Dew point		•	•
Wet Bulb		•	•
Interface		USB	Wireless
Certificate	CE/ETL	CE/ETL	CE/ETL

LIGHT METERS

	50,000Lux	Bar graph	LED	SMARTPHONE
Model	MS6610	MS6612	MS6612B	MS6612D
Page	124	125	125	125
Auto Ranging		•	•	•
Auto Power Off		•	•	•
Display Counts	2000	2000	2000	2000
Range	50000Lux	200000Lux 20000FC	200000Lux 20000FC	200000Lux 20000FC 999900CD
Unit Selection	Lux	Lux / FC	Lux / FC	Lux / FC / CD
Relative		•	•	•
Peak		•	•	•
MAX/MIN		•	•	•
Data Hold	•	•	•	•
Bar Graph		•	•	•
LED light source			•	•
Interface				Wireless
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL

SOUND LEVEL METERS

	130dB	Data Logging
Model	MS6708	MS6701
Page	127	128
Display	2000	2000
Auto Ranging	•	•
Auto Power Off	•	•
Sound Level	30~130dB	30~130dB
Dynamic	50dB	50dB
Frequency	30Hz~8kHz	30Hz~8kHz
A / C Weighting	•	•
Data Logging		16000
Data Hold	•	•
Date / Time		•
Backlight	•	•
MAX	•	•
AC adapter		•
AC/DC Signal output		•
Interface		RS232 /USB
Certificate	CE/ETL	CE/ETL

Fast Selection Charts

LASER DISTANCE METERS

	40m	60m	80m	100m
Model	MS6404	MS6406	MS6408	MS64100
Page	129	129	129	129
Auto Power Off	•	•	•	•
Distance	0.05~40m	0.05~60m	0.05~80m	0.05~100m
Accuracy	±2.0mm	±2.0mm	±2.0mm	±1.5mm
Area & Volume	•	•	•	•
Pythagorean proposition measurement	•	•	•	•
Unit (meter / Inch / feet)	•	•	•	•
Backlight	•	•	•	•
Foor Level	•	•	•	•
Laser target point	•	•	•	•
Data Logging	30 groups	30 groups	30 groups	99 groups
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL

GAS DETECTORS

	Gas detector
Model	MS6310
Page	132
Alarm at level	10%~40%
Response Time	2 seconds
Warm up time	2 Minutes
Easy to Identify	•
Pinpoint Gas Leaks	•
Portable	•
High Sensitivity	•
Resume Original measurement	State after 7~10 min in clear air
Gas Detected	Natural gas, Methance, Ethane, Propane
Certificate	CE/ETL

MULTIFUNCTION ENVIRONMENTAL METER

	Multifunction	
Model	MS6300	
Page	133	
Auto Ranging	•	
Auto Power Off	•	
Temperature	-10~60°C	
Humidity	20~80%RH	
Sound level	30~130dB	
Illuminance	50000Lux	
Wind Speed	m/s	0.5~20
	km/h	1.8~72
	FPM	100~4000
	Knots	0.9~38.9
AirFlow [CMM]	0~999900	
AirFlow [CFM]	0~999900	
A / C Weighting	•	
MAX/MIN/AVG/DIF	•	
Data Hold	•	
Backlight	•	
Certificate	CE/ETL	

TACHOMETERS

	Contact type	Non-Contact type
Model	MS6208A	MS6208B
Page	130	130
Contact	50~19999	
Non-Contact measurement		50~99999RPM
Measuring Distance		50~250mm
Auto Power Off	•	•
MAX/MIN	•	•
Data Hold	•	•
Backlight	•	•
Unit Selection	•	•
Data Logging	100 Groups	100 Groups
Certificate	CE/ETL	CE/ETL

MOISTURE TESTERS

	Moisture Tester
Model	MS6900A
Page	131
Range	Wood , Brick, Plaster ...
Testing Depth	50mm
Object moisture	0~60%
Ambient TEMP	-10~50°C 14~122°F
Sampling Rate	240mS
MAX/MIN	•
Unit Selection	WB, TD, °C, °F, %RH
Auxiliary Verification	•
Data Hold	•
Certificate	CE/ETL

PROCESS CALIBRATORS

	Thermocouple Calibrator	VOLT/mA calibrator	Multifunction Calibrator
Model	MS7220	MS7221	MS7212
Page	135	136	137
Safety Rating			▶ CAT II 600V
Auto Ranging	•	•	•
DC Voltage	-10~75mV	100mV / 10V	300V
AC Voltage			300V
DC Current		0~24mA	400mA
AC Current			400mA
Resistance			400kΩ
Frequency			30kHz
Themocouple Type	K.J.T.E.R.S.B.N		
Temperature	-250~1800°C -418~3272°F		-50~1300°C
MAX/MIN/AVG			•
Backlight			•
Data Hold			•
Interface			USB / RS232
Certificate	CE/ETL	CE/ETL	

PHASE ROTATION TESTERS

	plug-in test leads	Built-in test leads
Model	MS5900	MS5901
Page	139	139
Safety Rating	▶ CAT III 600V	▶ CAT III 600V
AC Voltage	400V	400V
Frequency	400Hz	400Hz
Motor & Phase Rotation Indicator	•	•
Certificate		CE/ETL

Fast Selection Charts

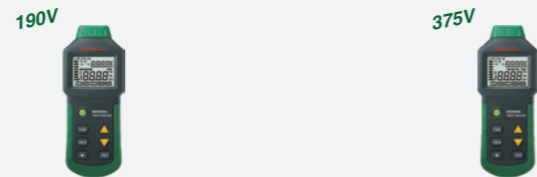
LCR METERS



Model	MS8910	MS8911	MS6013	MY6243	MS5308
Page	141	142	143	143	144
Auto Ranging	•	•			
Auto Power Off	•	•			
Resistance	300Ω/30MΩ	60Ω/20MΩ			20Ω/200MΩ
Capacitance	3nF/30mF	600pF/6mF	200pF/20mF	2nF/200μF	200pF/20mF
Inductance		600μH/200H		2mH~2H	200μH~20kH
Diode	•				
Continuity Buzzer	•				
Auto Scanning	•	•			
Zero Adjustment			•		
LCR / DCR		•			•
Data Hold	•	•			•
Backlight					•
Relative Measurement					•
Interface					RS232
Certificate	CE/ETL	CE/ETL	CE/ETL	CE/ETL	CE/ETL

CIRCUIT ANALYZERS

- ▶ CAT II
- ▶ CAT III
- ▶ CAT IV



Model	MS5908A	MS5908C
Page	147	147
Safety Rating	CAT III 300V	CAT III 300V
AC Voltage	190V	375V
Frequency	45~65Hz	45~65Hz
Motor & Phase Rotation Indicator		
Voltage Drop current	12/15/20A	5/8/10A
Impedance measurement	•	•
Loop Resistance measurement		
GFCI Test	•	•
RCD Test	•	•
Data Hold	•	•
Backlight	•	•
Certificate	CE/ETL	CE/ETL

Electrical Safety

Earth resistance testers | Insulation resistance testers | PAT testers





EARTH RESISTANCE CLAMP METER

EARTH RESISTANCE: 0.01-1200Ω
CURRENT: 100mA-20A

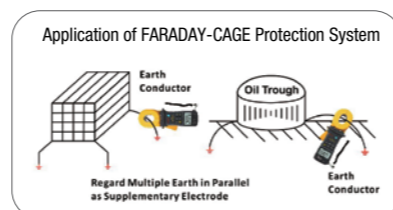
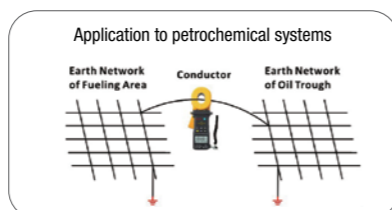
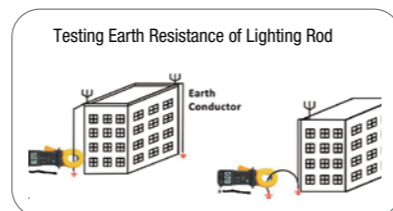
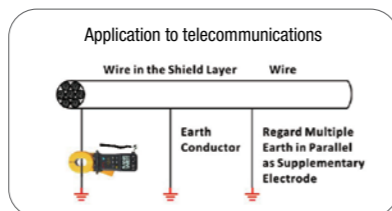
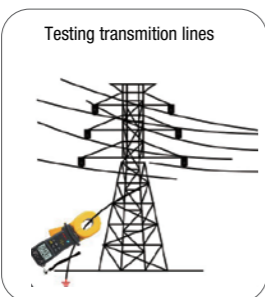
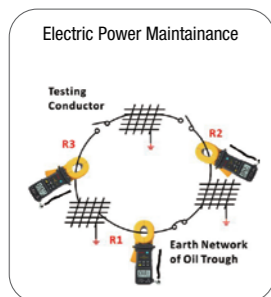
MS2301

Specifications	Range	Resolution	Accuracy
Earth Resistance	0.01Ω~0.999Ω	0.001Ω	±(1.5%+0.01Ω)
	1Ω~9.99Ω	0.01Ω	±(1.5%+0.3Ω)
	10Ω~99.9Ω	0.1Ω	±(3.0%+0.3Ω)
	100Ω~199.9Ω	1Ω	±(5.0%+3Ω)
	200Ω~400Ω	5Ω	±(6.0%+5Ω)
	400Ω~500Ω	10Ω	±(10%+10Ω)
	500Ω~1200Ω	20Ω	approx. 20%
Current	100mA	0.1mA	±(2.5%+1mA)
	300mA	0.3mA	±(2.5%+2mA)
	1A	0.001A	±(2.5%+0.003A)
	3A	0.003A	±(2.5%+0.01A)
	10A	0.01A	±(2.5%+0.03A)
	20A	0.03A	±(2.5%+0.05A)
Features			
Display	counts		9999
Jaw Opening	45mmx32mm/1.8"x1.3"		•
Auto Ranging	Auto		•
Test Voltage	3700V		•
Logging and Recall	99 groups		•
Alarm Limit Setting	Setting Alarm Threshold in 1~100Ω		•
LBD	Low Battery Display		•
Buzzer ON Symbol			•
Data Hold			•
General			
Power Supply	1×9V Alkaline Battery		
Product Size	276mm×104mm×54mm/10.8"×4.33"×2.1"		
Product Weight	1050g/2.31lb		
Certificate	RoHS		
Safety Rating	CAT III 150V		



Accessories included:

- Calibration Loop of Resistance (1Ω/5Ω/10Ω)
- Carry Case
- Battery and User's Manual

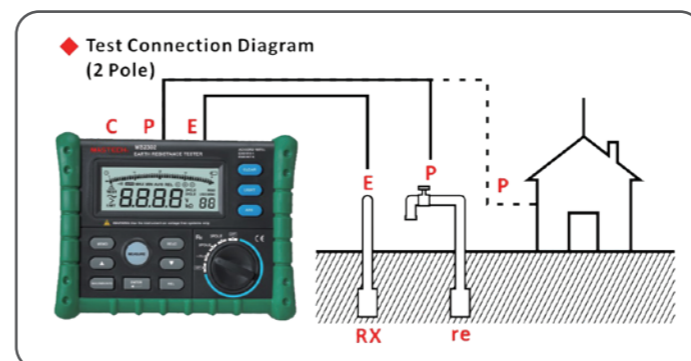
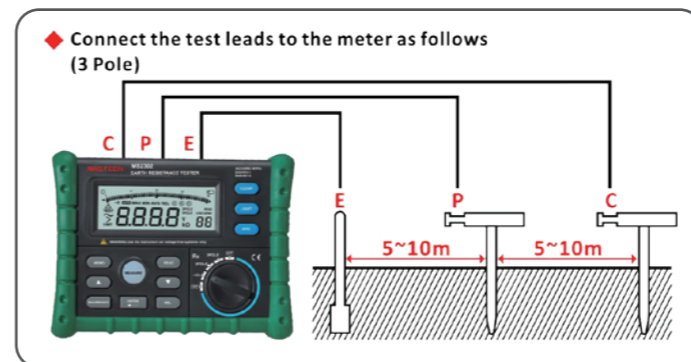


EARTH RESISTANCE TESTER

VOLTAGE: 0-200V
EARTH RESISTANCE: 0.01-4000Ω

MS2302

Specifications	Range	Resolution	Accuracy
Earth Ground Resistance	0~29.99Ω	0.01Ω	±(2%+6)
	30~99.9Ω	0.1Ω	±(3%+3)
	100~999Ω	1Ω	±(3%+3)
	1.00~4.00kΩ	10Ω	±(3%+3)
Measuring Voltage to Earth	AC 0~200V(50Hz/60Hz)	0.01V	±(2%+4)
Features			
Auto Ranging	Auto and Manual		•
APO	Auto Power Off		•
Segments Bar Graph			•
MAX/MIN/AVG			•
Continuity Test			•
REL	Relative Measurement		•
Data Logging	99 groups		•
Display Backlight			•
LBD	Low Battery Display		•
General			
Power Supply	6×1.5V AA Batteries		
Product Size	330mm×265mm×125mm/13"×10.4"×4.9"		
Product Weight	900g/1.98lb		
Certificate	CE/ETL/RoHS		
Safety Rating	CAT III 300V		





MS2306



MS2308

ADVANCED EARTH RESISTANCE TESTER

VOLTAGE:
AC/DC 20V/48V

EARTH RESISTANCE:
20kΩ/300kΩ

- MS2306
- MS2308

With the latest technology in a small-sized, robust and easy-to-use instrument, this series of earthing resistance tester is mainly used to test the earthing resistance of transformer, lightning-proof system, high-voltage power tower and telecommunication equipments, etc., providing a perfect solution for the earthing resistance test.



Accessories included:



Methods	Specifications	Resolution	Accuracy	MS2306	MS2308
				Range	
3 Pole & 4 Pole Earthing-Resistance Test	Test Voltage: AC20/48V	0.001Ω	±(5%+10)	0.1Ω~20kΩ (94Hz/128Hz)	0.02Ω~300kΩ
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Earthing-Resistance Test				
Selective mode (3 pole+ / 4 pole)	Test Voltage: AC20/48V	0.001Ω	±(5%+10)		0.02Ω~20kΩ
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Earthing-Resistance Test				
Non-auxiliary-polar mode	Test Voltage: AC48V	0.001Ω	±(10%+10)		0.02Ω~150Ω
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Earthing-Resistance Test				
2 Pole R (AC)	Test Voltage: AC20V	0.001Ω	±(5%+10)	0.1Ω~20kΩ (94Hz/128Hz)	0.02Ω~300kΩ
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Earthing-Resistance Test				
2/4 Pole R (DC)	Test Voltage: DC20V	0.001Ω	±(5%+10)		0.02Ω~3kΩ
	Earthing-Resistance Test				
Soil Resistivity ρ	Test Voltage: AC20/48V	0.001Ω	±(5%+10)	0.02~1000 (94Hz/128Hz)	0.02~1000
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Range: (kΩ·m)				
RK (Wire Compensation)	Test Voltage: AC20/48V	0.001Ω	±(3%+10)	30Ω (94Hz/128Hz)	30Ω
	Test Frequency: 94Hz/105Hz/111Hz/128Hz/AFC				
	Range: 30Ω				
Interfering Voltage/Current/Frequency	Interfering Voltage: 1~50V DC/AC	0.1V	±(5%+5)	•	•
	Interfering Frequency: 16Hz~400Hz	1Hz	±(1%+10)	•	•
	Interfering Current: 20mA~2A	1mA	±(5%+5)	•	•
Short Circuit Current				≤100mA	≤250mA

Features		
Display	Digital/analog dual display; LCD with backlight	9999
Apo	Auto Power Off	•
Clock	To switch input-cursor position when changing date/time	•
AVG	Indicator for averaged-value measurement	•
RK	Compensation Resistance	•
Limit	Limit Value	•
o))	Alarming indicator for limit-value measurement	•
	Battery capacity indicator	•
B.Light	Display Backlight	•
Length	Testing length between resistivity testing point	•
Data Storage	100 groups measurement can be memorized	•

General	
Power supply	6XLR14 alkaline(2#); rated voltage: 6×1.5V
	Recharge Battery: NI-MH Recharge Battery, 7.2V
	Charger: Input voltage: 100V~240V; Frequency: 50Hz~60Hz; Output Voltage: 12VDC 3A
Product Size	284mm×230mm×125mm/11.2"×9.1"×4.9"
Product Weight	2.5kg/5.5lb
Certificate	CE/ETL/RoHS





DIGITAL INSULATION TESTER

MEASURED VOLTAGE:
DC 1000V
AC 700V

TEST VOLTAGE:
DC 1000V

■ MS5201

Specifications	Range	Resolution	Accuracy
AC Voltage (40~400Hz)	700V	1V	±(1.2%+5)
DC Voltage	1000V	1V	±(0.8%+3)
Resistance	200Ω @1mA	0.1Ω	±(1.0%+3)
Insulation Test Voltage			
DC 250V ±10%	200MΩ		±(3%+5)
DC 500V ±10%	200MΩ		±(3%+5)
DC1000V ±10%	50~1000MΩ		±(3%+5)
	1000~2000MΩ		±(5%+5)
Output Short Circuit Current	≤2.5mA		
Features			
Display	counts		2000
Continuity Buzzer	<50Ω		•
Data Hold			•
LBD	Low Battery Display		•
LOCK	Constant Measuring Lock		•
General			
Power Supply	6×1.5V AA Batteries		
Product Size	192mm×122mm×55mm/7.48"×4.7"×2.2"		
Product Weight	545g/1.3lb		
Certificate	RoHS		
Safety Rating	CAT II 1000V/CAT III 600V		



Accessories included:



DIGITAL INSULATION TESTER

MEASURED VOLTAGE:
DC 1000V / AC 750V

TEST VOLTAGE:
DC 1000V

■ MS5203

Output Voltage	Range	Resolution	Test Current	Accuracy
50V (0~20%)	0~20MΩ	0.01MΩ	1mA	±(3%+5)
	20~50MΩ	0.1MΩ	@50k	
100V (0~20%)	0~20MΩ	0.01MΩ	1mA	±(3%+5)
	20~100MΩ	0.1MΩ	@100k	
250V (0~20%)	0~20MΩ	0.01MΩ	1mA	±(3%+5)
	20~200MΩ	0.1MΩ	@250k	
	200~250MΩ	1MΩ		
500V (0~20%)	0~20MΩ	0.01MΩ	1mA	±(3%+5)
	20~200MΩ	0.1MΩ	@500k	
	200~500MΩ	1MΩ		
	0~200MΩ	0.1MΩ		
1000V (0~20%)	200~1000MΩ	1MΩ	1mA	±(3%+5)
	1.00~5.00GΩ	0.01GΩ	@1000k	±(5%+10)
	5.00~10.00GΩ	0.01GΩ		±(10%+20)
DC Voltage Test	200V/1000V	0.1V/1V		±(0.5%+5)
AC Voltage Test	200V/750V	0.1V/1V		±(1.5%+5)
Resistance/	20Ω/200Ω	0.01/0.1Ω	1mA	±(1%+5)
Continuity Test	0.01~200Ω		1mA	±(0.5%)

Features			
APO	Auto Power Off		•
MIN/MAX/AVG			•
COMP	Compare function		•
TIMER			•
MEMO	Storage function		•
DAR/PASS			•
Backlight			•
REL	Relative Measurement		•
Data Hold	LOCK		•
LBD	Low Battery Display		•

General			
Power Supply	6×1.5V AA Batteries		
Product Size	200mm×155mm×76mm/7.6"×5.9"×2.95"		
Product Weight	900g/1.98lb		
Certificate	CE/ETL/RoHS		
Safety Rating	CAT III 1000V/CAT IV 600V		



Accessories included:

- Test Leads
- Test Clips
- Wrapping Bag
- Battery and User's Manual





ADVANCED HIGH VOLTAGE INSULATION TESTER

MEASURED VOLTAGE:
DC 50-1000V
AC 50-750V

TEST VOLTAGE:
DC 5000V

MS5215

The MS5215 is the simplest unit available in the Mastech Advanced line of insulation resistance testers. The unit is capable of testing insulation resistance up to 5kV output DC voltage and 5TΩ resistance. The MS5215 comes standard with a range of new features and design updates which make it easy to use daily in professional settings.



Accessories included:

Host computer x 1		USB x 1		1m
		Rechargeable battery pack (for charging Ni-Hy battery) To be used with AC charger x 1		LR14 alkaline batteries x 6
Tester probes leads x 3		Temperature Sensor x 1		Data analysis Software CD x 1
Crocodile clips x 3		Users Manual x 1		Charger x 1
		Instrument backpack x 1		

MS5215

Operating Voltage	Measuring Range	Accuracy
250V DC	0.01MΩ~2.5GΩ	±(5%+5)
	2.51GΩ~250GΩ	±(20%+10)
500V DC	0.01MΩ~5.0GΩ	±(5%+5)
	5.01GΩ~500GΩ	±(20%+10)
1000V DC	0.01MΩ~10GΩ	±(5%+5)
	10.01GΩ~500GΩ	±(20%+10)
2.5KV DC	0.01MΩ~25GΩ	±(5%+5)
	25.1GΩ~500GΩ	±(20%+10)
5KV DC	0.01MΩ~50GΩ	±(5%+5)
	50.1GΩ~500GΩ	±(20%+10)
	501GΩ~999GΩ	±(30%+20)
	1TΩ~2.5TΩ	±(30%+40)

Range	Measuring Range	Accuracy
10nA	1.00nA~9.99nA	±(15%+1nA)
100nA	9.0nA~99.9nA	±(15%+5)
1000nA	100nA~999nA	±(2.5%+5)
10μA	0.90μA~9.99μA	
100μA	9.0μA~99.9μA	
1000μA	90μA~999μA	
3mA	0.90mA~3.00mA	

Range of insulation	Range of humidity	Range of temperature
0Ω~100MΩ	<85% RH	23°C ±5°C 73°F ±9°F
101Ω~20GΩ	<75% RH	
21GΩ~500GΩ	<65% RH	
501GΩ~5TΩ	<55% RH	

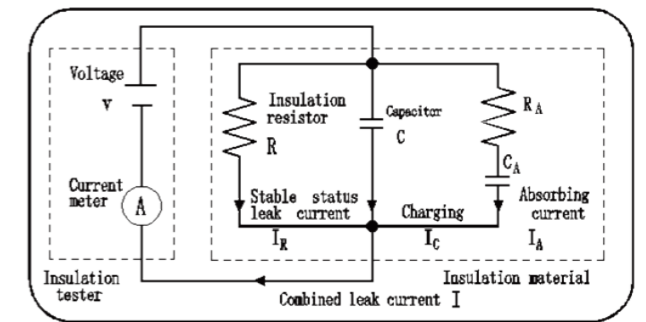
Test Mode	DC Voltage	AC Voltage
Test Range	±(50V~1000V)	±50V~750V (50Hz~60Hz)
Precision error	±(5%+5)	±(5%+5)
Input Resistance	Approx. 10MΩ	Approx. 10MΩ

Measuring Range	Measuring Precision Accuracy
-10°C~0°C	±1.5°C
0°C~40°C	±2.0°C
40°C~70°C	±1.5°C

Power Supply	6×Lr14(2#) Batteries, or 6×1.2V AA Batteries (Charger: Input Voltage 100V~240V)
Product Size	284mm×230mm×125mm/11.2"×9.1"×4.9"
Product Weight	2426g/5.34lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V/CAT IV 600V

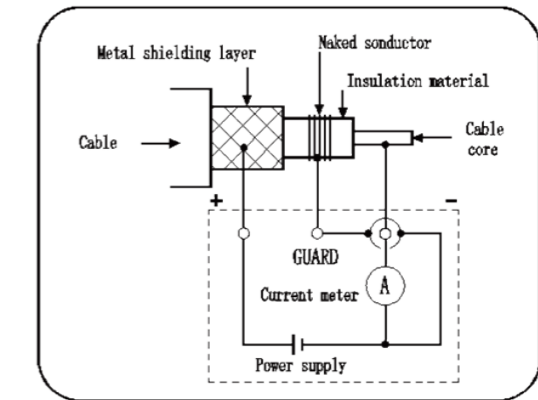
Insulation Resistance Test

Calculation equation: $R = V/I$



After the voltage is applied, I_C and I_A decrease gradually.

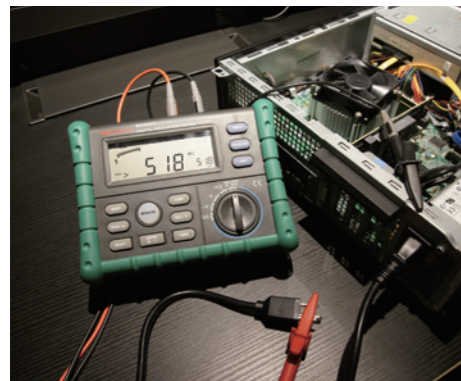
Cable Test





Accessories included:

- Test Leads
- Test Clips
- Wrapping Bag
- Battery and User's Manual



DIGITAL INSULATION TESTER

MEASURED VOLTAGE: DC 1000V / AC 750V
TEST VOLTAGE: DC 2500V

MS5205

MS5205				
Output Voltage	Range	Resolution	Test Current	Accuracy
250V (0~20%)	0~20MΩ	0.01MΩ	1mA @250k	±(3%+5)
	20~200MΩ	0.1MΩ		
	200~250MΩ	1MΩ		
500V (0~20%)	0~20MΩ	0.01MΩ	1mA @500k	±(3%+5)
	20~200MΩ	0.1MΩ		
	200~500MΩ	1MΩ		
1000V (0~20%)	0~20MΩ	0.01MΩ	1mA @1000k	±(3%+5)
	20~200MΩ	0.1MΩ		
	200~1000MΩ	1MΩ		
2500V (0~20%)	0~20MΩ	0.01MΩ		±(3%+5)
	20MΩ~200MΩ	0.1MΩ		
	200MΩ~2000MΩ	1MΩ		±(5%+0.2GΩ)
	2000MΩ~20GΩ	0.01GΩ		
20GΩ~100GΩ	0.1GΩ	±(10%+2GΩ)		
DC Voltage Test	200V/1000V	0.1V/1V		±(0.5%+5)
AC Voltage Test	200V/750V (50~60Hz)	0.1V/1V		±(1.5%+5)
Resistance	20Ω	0.01Ω	1mA	±(1%+5)
	200Ω	0.1Ω		±(1%+5)

Features

APO	Auto Power Off	•
LOCK		•
MIN/MAX/AVG		•
COMP	Compare function	•
TIMER	Timer function	•
MEMO	Storage function	•
DAR		•
PASS		•
Backlight		•
REL	Relative Measurement	•
Data Hold		•
LBD	Low Battery Display	•

General

Power Supply	8×1.5V AA Batteries
Product Size	180mm×140mm×65mm/7.1"×5.5"×2.56"
Product Weight	900g/1.98lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V/CAT IV 600V

PAT TESTER

-Grounding
-Leakage current
-Insulation resistance
-Data logging

**MS5911
MS5911A
MS5911D**

Function	Technical parameters	Range	Accuracy
Grounding performance	Test current >200mA (R<2Ω)	0Ω~19.99Ω	±5%+3
	Test voltage 5VDC, Test time 5S		
Insulation resistance	Test voltage 500VDC	0.2MΩ~19.99MΩ	±5%+3
	Test current> 1mA (R = 500kΩ)		
	Test time 5S		
Leakage current	Test voltage 250VDC	0.2MΩ~19.99MΩ	±5%+3
	Test current> 1mA (R = 250kΩ)		
	Test time 5S		
Leakage current	Test voltage 50V rms / 50Hz	0.10mA~10.50mA	±5%+3
	Test time 5S		

Features

APO	Auto power off	•
Data Logging	300 groups	•
Safety CLASS I	Grounding / Insulation resistance / Leakage current	•
Safety CLASS II	Insulation resistance / Leakage current	•
Cord test	Grounding / Insulation resistance / Leakage current	•
Polarity test		•
Power socket test		•
LBD	Low battery detection	•
Backlight		•

General

Power Supply	DV12V or 8×1.5V AA Batteries
Product Size	204mm×155mm×76mm/7.8"×6.1"×3"
Product Weight	1270g/2.8lb
Certificate	MS5911A: RoHS / MS5911&MS5911D: CE/RoHS
Safety Rating	CAT II 300V

MS5911



MS5911A



MS5911D



Accessories included:

- Main test cord
- Alligator clip test cord
- Probe
- Rugged padded carrying case
- Battery and user's manual
- DC power adapter (optional)



Accessories included:

- Main test cord
- Alligator clip test cord
- Probe
- Rugged padded carrying case
- Battery and user's manual
- DC power adapter (optional)

PAT TESTER QWERTY KEYBOARD

- Grounding
- Leakage current
- Insulation resistance
- Data logging

- MS5922A
- MS5922E
- MS5922D

Function	Technical parameters	Range	Accuracy
Grounding performance	Test current >200mA (R<2Ω)	0Ω~19.99Ω	±5%+3
	Test voltage 5VDC, Test time 5S		
Insulation resistance	Test voltage 500VDC	0.2MΩ~19.99MΩ	±5%+3
	Test current> 1mA (R = 500kΩ)		
	Test time 5S	0.2MΩ~19.99MΩ	±5%+3
	Test voltage 250VDC		
Leakage current	Test current> 1mA (R = 250kΩ)		
	Test time 5S		
	Test voltage 50V rms / 50Hz	0.10mA~10.50mA	±5%+3
	Test time 5S		

Features		
APO	Auto power off	•
Data Logging	300 groups	•
Safety CLASS I	Grounding / Insulation resistance / Leakage current	•
Safety CLASS II	Insulation resistance / Leakage current	•
Cord test	Grounding / Insulation resistance / Leakage current	•
Polarity test		•
Power socket test		•
LBD	Low battery detection	•
Backlight		•
Built-in Keyboard		•

General	
Power Supply	DV12V or 8×1.5V AA Batteries
Product Size	204mm×155mm×76mm/7.8"×6.1"×3"
Product Weight	1270g/2.8lb
Certificate	MS5922A: RoHS / MS5922E&MS5922D: CE/RoHS
Safety Rating	CAT II 300V

MS5922E



MS5922A



MS5922D



Digital Multimeters

Pocket size | Manual range | Auto range
Special application | Bench type





DIGITAL MULTIMETER

MAIN FEATURES:

- Display 2000 counts
- Diode Open Voltage 3.0V

- **M300C**
- **M320**

VOLTAGE:	CURRENT:
DC 600V	DC 400mA
AC 600V	AC 400mA

Specifications	Range	Resolution	Accuracy	
			M300C	M320
DC Voltage	2V	1mV	±(0.5%+1)	
	20V/200V/300V	10mV/100mV/1V	±(0.8%+1)	
	400mV/4V/40V/400V	0.1mV/1mV/10mV/100mV		±(0.5%+3)
	600V	1V		±(0.8%+3)
AC Voltage	200V/300V	100mV/1V	±(1.2%+10)	
	4V/40V/400V	1mV/10mV/100mV		±(0.8%+4)
	600V	1V		±(1.0%+4)
DC Current	200mA	0.1mA	±(2.0%+2)	
	40mA/400mA	0.01mA/0.1mA		±(2.0%+3)
AC Current	40mA/400mA	0.01mA/0.1mA		±(3.0%+4)
	2kΩ/20kΩ/200kΩ/2MΩ	1Ω/10Ω/100Ω/1kΩ	±(1.0%+2)	
Resistance	400Ω/4kΩ/40kΩ/	0.1Ω/1Ω/10Ω/		±(1.0%+3)
	400kΩ/4MΩ	0.1kΩ/1kΩ		
	40MΩ	10kΩ		±(2.0%+4)
Capacitance	4nF	1pF		±(5.0%+10)
	40nF	10pF		±(4.0%+5)
	400nF/4μF/40μF/100μF	/0.1nF/1nF/10nF/0.1μF		±(3.0%+3)
Frequency	10Hz/100Hz/1kHz/	0.01Hz/0.1Hz/1Hz/		±(0.5%+3)
	10kHz/100kHz	10Hz/0.1kHz		

Features			
Display counts		2000	4000
Auto Power Off			•
Auto Ranging			•
Diode	Open Voltage	3.0V	1.5V
Continuity Buzzer	<50±20Ω	•	•
Data Hold			•
LBD	Low Battery Display	•	•

General			
Power Supply	M300C: 1×12V A23S Battery	M320: 2×1.5V 357A(LR44) Batteries	
Product Size	120mm×70mm×18mm/4.7"×2.75"×0.7"		
Product Weight	110g/0.23lb		
Certificate	CE/ETL/RoHS		
Safety Rating	M320 - CAT III 300V/CAT II 600V		

TRMS DIGITAL MULTIMETER

MAIN FEATURES:

- Display 6000 counts
- TRMS
- Auto Power Off
- Auto range

- **MS8333A**

VOLTAGE:	CURRENT:
DC 600V	DC 600mA
AC 600V	AC 600mA

Specifications	Range	Resolution	Accuracy	
			M300C	M320
DC Voltage	600mV/6V/60V/600V	0.1mV/0.001V/0.01V/0.1V		±(0.5%+3)
AC Voltage	6V/60V/600V	0.001V/0.01V/0.1V		±(1.0%+3)
DC Current	600μA/6000μA/60mA/600mA	0.1μA/1μA/0.01mA/0.1mA		±(1.0%+5)
AC Current	600μA/6000μA/60mA/600mA	0.1μA/1μA/0.01mA/0.1mA		±(1.8%+3)
Resistance	600Ω/6kΩ/60kΩ/600kΩ/6MΩ	0.1Ω/0.001kΩ/0.01kΩ/		±(0.7%+3)
	60MΩ	0.1kΩ/0.001MΩ		±(2.0%+3)
Capacitance	6nF/60nF/600nF/	0.001nF/0.01nF/0.1nF/		±(3.0%+8)
	6μF/60μF/600μF	1nF/10nF/100nF		
Frequency	10Hz/100Hz/1000Hz/10kHz	0.001Hz/0.01Hz/0.1Hz/1Hz		±(1.5%+15)
Duty Cycle	0.5%~99.9%	0.1%		±(2.0%+5)

Features		
Display Counts		6000
Auto range	Auto	•
AP0	Auto Power Off	•
True RMS	For AC Voltage & AC Current	•
Continuity Buzzer	<50±20Ω	•
Diode	Open Voltage	4V
Data Hold		•
Display Backlight		•
LBD	Low Battery Display	•
NCV	Non-Contact Voltage Detector	•
Battery Tester	1.5V	•

General	
Power Supply	2×1.5V AAA Batteries
Product Size	122mm×62mm×44mm/4.8"×2.44"×1.73"
Product Weight	186g/0.4lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Battery and User's Manual



Accessories included:

- Battery and User's Manual





PEN-TYPE DIGITAL MULTIMETER

- MAIN FEATURES:**
- Display 2000 counts
 - Auto Power Off
 - Auto & Manual Ranging
 - Diode Open Voltage 1.5V

MS8223A

VOLTAGE:	CURRENT:
DC 600V	DC 200mA
AC 600V	AC 200mA

MS8223A

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V/600V	0.1mV/1mV/20mV/0.1V/1V	±(0.7%+2)
AC Voltage	200mV/2V/20V/200V	0.1mV/1mV/20mV/0.1V	±(0.8%+3)
	600V	1V	±(1.0%+3)
Resistance	200Ω	0.1Ω	±(1.0%+3)
	2kΩ/20kΩ/200kΩ/2MΩ	1Ω/10Ω/0.1kΩ/1kΩ	±(1.0%+1)
	20MΩ	0.01MΩ	±(1.0%+5)
DC Current	20mA/200mA	20μA/0.1mA	±(1.5%+3)
AC Current	20mA/200mA	20μA/0.1mA	±(2.0%+3)

Features		
Display Counts		2000
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Diode	Open Voltage	1.5V
MAX	Maximum Value Hold	•
Data Hold		•
LBD	Low Battery Display	•
Continuity Buzzer		<50Ω
NCV	Detection: >50V AC	•
Logic Level Test	High / Low level	•
Work Light		•
Housing	Double Molding	•

General	
Power Supply	2×1.5V AAA Batteries
Model number	MS8223A
Product Size	225×52×40mm
Product Weight	138g/0.3lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Alligator Clips
- Battery and User's Manual

DIGITAL MULTIMETER

- MAIN FEATURES:**
- Resistance
 - Diode and continuity
 - Low battery indicator

MAS830
MAS830L

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	

MAS830 MAS830L

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/0.1V	±(0.5%+3)
	600V	1V	±(0.8%+5)
AC Voltage	200V/600V	0.1V/1V	±(1.2%+10)
	20μA	0.01μA	±(1.0%+3)
DC Current	200μA/2mA	0.1μA/1μA	±(1.0%+3)
	20mA	10μA	±(1.0%+5)
	200mA	0.1mA	±(1.5%+5)
Resistance	10A	10mA	±(3.0%+10)
	200Ω	0.1Ω	±(0.8%+5)
	2kΩ/20kΩ/200kΩ	1Ω/10Ω/0.1kΩ	±(0.8%+2)
	2MΩ	1kΩ	±(1.0%+5)

Features		
Display Counts		2000
Diode	Open Voltage	3.0V
Data Hold		•
LBD	Low Battery Display	•
Continuity Buzzer	<70 ±30Ω	•
Display Backlight		•

General	
Power Supply	1×9V 6F22 NEDA 1604 Battery
Product Size	145mm×76mm×40mm/5.7"×3"×1.57"
Product Weight	202g/0.44lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Battery and User's Manual



DIGITAL MULTIMETER WITH TEMPERATURE

MAIN FEATURES:
 - Display 2000 counts
 - Diode Open Voltage 3.0V
 - Continuity Buzzer <70 ±30Ω
 - Data Hold

MAS838

VOLTAGE: DC 600V
AC 600V
CURRENT: DC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V 600V	0.1mV/1mV/10mV/0.1V 1V	±(0.5%+3) ±(0.8%+5)
AC Voltage	200V/600V	0.1V/1V	±(1.2%+10)
DC Current	200µA/2mA	0.1µA/1µA	±(1.0%+3)
	20mA	10µA	±(1.0%+5)
	200mA	0.1mA	±(1.5%+5)
	10A	10mA	±(3.0%+10)
Resistance	200Ω	0.1Ω	±(0.8%+5)
	2kΩ/20kΩ/200kΩ	1Ω/10Ω/0.1kΩ	±(0.8%+2)
	2MΩ	1kΩ	±(1.0%+5)
Temperature	-20°C~0°C	1°C	±(10%+2)
	0°C~400°C	1°C	±(1.0%+2)
	400°C~1000°C	1°C	±(2.0%)

Features		
Display Counts		2000
Diode	Open Voltage	3.0V
Continuity Buzzer	<70 ±30Ω	•
Data Hold		•
LBD	Low Battery Display	•

General		
Power Supply	1×9V 6F22 NEDA 1604 Battery	
Product Size	145mm×76mm×40mm/5.7"×3"×1.57"	
Product Weight	202g/0.44lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT III 600V	



Accessories included:

- Test Leads
- K Type Thermocouple
- Battery and User's Manual



DIGITAL MULTIMETER WITH BATTERY TEST

MAIN FEATURES:
 - Display 2000 counts
 - Diode Open Voltage 3.0V
 - Continuity Buzzer <50Ω
 - Data Hold

MS8238

VOLTAGE: DC 600V
AC 600V
CURRENT: DC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V 600V	0.1mV/1mV/10mV/0.1V 1V	±(0.5%+2) ±(0.8%+5)
AC Voltage	200V/600V	0.1V/1V	±(1.0%+5)
DC Current	2mA/20mA/200mA 10A	1µA/10µA/0.1mA 10mA	±(0.8%+3) ±(2.5%+3)
	Resistance	200Ω/2kΩ/20kΩ 200kΩ/2MΩ	0.1Ω/1Ω/10Ω 0.1kΩ/1kΩ

Features		
Display Counts		2000
Diode	Open Voltage	3.0V
Continuity Buzzer		<50Ω
Data Hold		•
LBD	Low Battery Display	•
Battery Test	1.5V/9V/12V	•

General	
Power Supply	1×9V 6F22 NEDA 1604 Battery
Product Size	148mm×73.5mm×50mm/5.8"×2.9"×1.96"
Product Weight	232g/0.51lb
Certificate	RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Battery and User's Manual





DIGITAL MULTIMETER WITH NON-CONTACT VOLTAGE

- MAIN FEATURES:**
- Display 2000 counts
 - Diode Open Voltage 3.0V
 - Continuity Buzzer <60Ω
 - Data Hold

- **MS8233B**
- **MS8233C**

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

Specifications	Range	Resolution	Accuracy	
			MS8233B	MS8233C
DC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/0.1V	±(0.5%+3)	
	600V	1V	±(0.5%+3)	
AC Voltage	200V	100mV	±(1.2%+10)	
	600V	1V	±(1.2%+10)	
DC Current	200μA/2000μA/20mA/200mA	0.1μA/1μA/10μA/0.1mA	±(1.0%+3)	
	10A	0.01A	±(3.0%+5)	
Resistance	200Ω/2kΩ/20kΩ/200kΩ	0.1Ω/1Ω/10Ω/0.1kΩ	±(0.8%+4)	
	2MΩ	1kΩ	±(0.8%+4)	
Temperature	-20°C~0°C / -4°F~32°F	1°C/1°F		±(10%+2)
	0°C~400°C / 33°F~752°F	1°C/1°F		±(1%+3)
	400°C~1000°C / 752°F~1832°F	1°C/1°F		±(2.0%)

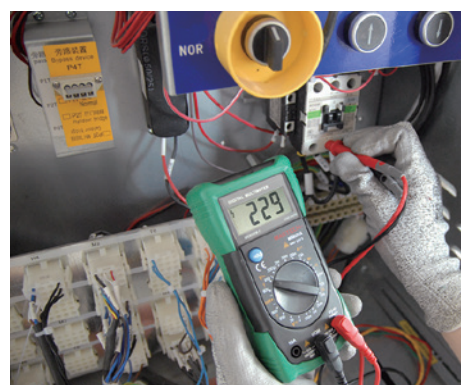
Features		
Display Counts		2000
Diode	Open Voltage	3.0V
Continuity Buzzer		<60Ω
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•
NCV	Non-contact Voltage Detection	•

General	
Power Supply	1×9V 6F22 Battery
Product Size	140mm×67mm×30mm/5.5"×2.6"×1.2"
Product Weight	112g/0.25lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- K type Thermocouple
- Battery and User's Manual



DIGITAL MULTIMETER

- MAIN FEATURES:**
- Display 2000 counts
 - Auto Power Off
 - Transistor hFE 0~1000
 - Diode Open Voltage 3.0V

- **MY70**
- **MY74**

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

Specifications	Range	Resolution	Accuracy	
			MY70	MY74
DC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/0.1V	±(0.5%+2)	±(0.5%+2)
	600V	1V	±(0.8%+2)	±(0.8%+2)
AC Voltage	200mV	0.1mV	±(1.2%+3)	
	2V/20V/200V	1mV/10mV/0.1V	±(0.8%+3)	±(0.8%+3)
DC Current	200μA	0.01μA	±(2.0%+5)	
	200μA	0.1μA	±(0.8%+1)	
DC Current	2mA	1μA	±(0.8%+1)	±(0.8%+1)
	20mA	10μA	±(0.8%+1)	±(0.8%+1)
	200mA	0.1mA	±(1.5%+1)	±(1.5%+1)
	10A	0.01A	±(2.0%+5)	±(2.0%+5)
AC Current	20μA	0.01μA	±(2.0%+5)	
	200μA	0.1μA	±(1.0%+5)	
	2mA	1μA	±(1.0%+5)	
	20mA	10μA	±(1.0%+5)	±(1.0%+5)
Resistance	200mA	0.1mA	±(1.8%+5)	±(1.8%+5)
	10A	0.01A	±(3.0%+7)	±(3.0%+7)
	200Ω	0.1Ω	±(0.8%+3)	±(0.8%+3)
	2kΩ/20kΩ/200kΩ/2MΩ	1Ω/10Ω/0.1kΩ/1kΩ	±(0.8%+2)	±(0.8%+2)
Capacitance	20MΩ	10kΩ	±(1.0%+2)	±(1.0%+2)
	200MΩ	0.1MΩ	±(6.0%+10)	±(6.0%+10)
	2nF/20nF/200nF/2μF	1pF/10pF/0.1nF/1nF		±(4.0%+3)
Frequency	100μF	0.1μF	±(6.0%+10)	
	20kHz	0.01kHz		±(2.0%+5)
Temperature	-20°C~0°C	1°C		±(5.0%+4)
	1°C~400°C	1°C		±(2.0%+3)
	401°C~1000°C	1°C		±(2.0%+5)

Features		
Display Counts		2000
APO	Auto Power Off	•
Transistor hFE	0~1000	•
Diode	Open Voltage	3.0V
Continuity Buzzer	<50Ω	•
Data Hold		•
LBD	Low Battery Display	•

General	
Power Supply	1×9V 6F22 Battery
Product Size	188mm×93mm×50mm/7.4"×3.7"×1.96"
Product Weight	380g/0.84lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- K type Thermocouple (MY74)
- Multi-Function Socket
- Battery and User's Manual





DIGITAL MULTIMETER 20000 COUNTS

MY75

- MAIN FEATURES:**
- Display backlight, Work Light
 - Diode and Continuity detection
 - Relative measurement
 - Data Hold, Max/Min hold

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 1000V	AC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	200 mV	0.01mV	±(0.05%+3)
	2V/20V/200V	0.1mV/1mV/10mV	±(0.1%+3)
	600V	0.1V/1V	±(0.15%+3)
AC Voltage	2V	0.1Vm	±(0.5%+3)
	20V/200V	1mV/10mV	±(0.8%+10)
	600V	0.1V/1V	±(1.0%+15)
DC Current	2mA/20mA	0.1µA/1µA	±(0.5%+50)
	200mA	10µA	±(0.8%+50)
	10A	1mA/10mA	±(2.0%+10)
AC Current	2mA/20mA	0.1µA/1µA	±(0.8%+50)
	200mA	10µA	±(1.2%+50)
	10A	1mA/10mA	±(2.5%+10)
Resistance	200Ω	0.01Ω	±(0.5%+10)
	2kΩ	0.1Ω	±(0.3%+3)
	20kΩ/200kΩ/2MΩ/20MΩ	1Ω/10Ω/0.1kΩ/1kΩ	±(0.3%+1)
	200MΩ	0.01MΩ	±(5.0%+10)
Capacitance	2µF/20µF/100µF/20nF/200nF	0.1nF/1nF/10nF/1pF/10pF	±(4.0%+20)
Frequency	20kHz	1Hz	±(1.5%+5)

Features		
Display Counts		20000
Diode	Open Voltage	3.0V
Continuity Buzzer		<60Ω
Data Hold		•
APO	Auto Power Off	•
Transistor hFE	0~1000	•
LBD	Low Battery Display	•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	188mm×93mm×50mm/7.4"×3.7"×1.96"	
Product Weight	380g/0.84lb ; MY78 420g/0.92lb	
Certificate	CE/ETL/RoHS	
Safety Rating	MS8233D: CAT II 600V / MS8233E: CAT III 600V	

Accessories included:

- Test Leads
- Multi-Function Socket
- Battery and User's Manual



DIGITAL MULTIMETER WITH INDUCTANCE

MS8269

- MAIN FEATURES:**
- Display 2000 counts
 - Auto Power Off
 - Transistor hFE 0~1000
 - Diode Open Voltage 3.0V

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 750V	AC 10A

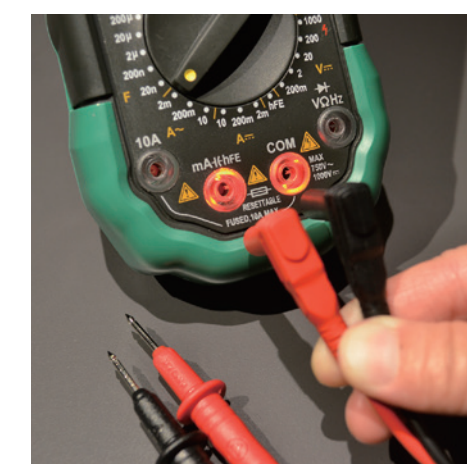
Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/100mV	±(0.5%+1)
	1000V	1V	±(0.8%+2)
AC Voltage	2V/20V/200V	1mV/10mV/100mV	±(0.8%+3)
	750V	1V	±(1.2%+3)
DC Current	200mA	0.1mA	±(1.5%+1)
	10A	10mA	±(2.0%+5)
AC Current	200mA	0.1mA	±(1.8%+3)
	10A	10mA	±(3.0%+7)
Resistance	200Ω	0.1Ω	±(0.8%+3)
	2kΩ/20kΩ/200kΩ/2MΩ	1Ω/10Ω/100Ω/1kΩ	±(0.8%+1)
Capacitance	20nF/200nF/2µF	10pF/0.1nF/1nF	±(4.0%+8)
	200µF	0.1µF	±(4.0%+15)
Inductance	20mH/200mH/2H/20H	10µH/0.1mH/1mH/10mH	±(3.0%+8)
	-20°C~0°C	1°C	±(5.0%+4)
Temperature	1°C~400°C	1°C	±(1.0%+3)
	401°C~1000°C	1°C	±(2.0%)

Features		
Display Counts		2000
APO	Auto Power Off	•
Transistor hFE	0~1000	•
Diode	Open Voltage	3.0V
Continuity Buzzer		<70Ω
Data Hold		•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	195mm×92mm×55mm/7.7"×3.6"×2.2"	
Product Weight	380g/0.83lb	
Certificate	RoHS	
Safety Rating	CATII 1000V/CATIII 600V	



Accessories included:

- Test Leads
- Multi-Function Socket
- Battery and User's Manual
- K type thermocouple



AUTO RANGE - ESSENTIALS



DIGITAL MULTIMETER WITH NON-CONTACT VOLTAGE

- MAIN FEATURES:**
- Display 2000 counts
 - Auto & Manual Ranging
 - Diode Open Voltage 1.5V
 - Continuity Buzzer <60Ω
- VOLTAGE:**
DC 1000V
AC 1000 V
- CURRENT:**
DC 10A
AC 10A

- **MS8233D**
- **MS8233E**

Specifications	Range	Resolution	MS8233D		MS8233E
			Accuracy		Accuracy
DC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/0.1V	±(0.5%+2)		
	600V	1V	±(0.8%+2)		
AC Voltage	2V/20V/200V	1mV/10mV/0.1V	±(0.9%+3)		
	600V	1V	±(1.2%+3)		
DC Current	200μA/2000μA/20mA/200mA	0.1μA/1μA/10μA/0.1mA	±(1.5%+4)		
	10A	0.01A	±(3.0%+5)	±(1.5%+3)	
AC Current	200μA/2000μA/20mA/200mA	0.1μA/1μA/10μA/0.1mA	±(1.5%+4)		
	10A	0.01A	±(3.0%+5)	±(1.5%+4)	
Resistance	200Ω/2kΩ/20kΩ/200kΩ	0.1Ω/1Ω/10Ω/0.1kΩ	±(0.8%+2)		
	2MΩ/20MΩ	1kΩ/20kΩ	±(1.0%+2)		
Frequency	0~20kHz	10Hz	±(1.5%+5)		
	-20°C~0°C / -4°F~32°F	1°C/1°F	±(5.0%+3)		
Temperature	0°C~400°C / 33°F~752°F	1°C/1°F	±(2.0%+3)		
	400°C~1000°C / 752°F~1832°F	1°C/1°F	±(3.0%+3)		

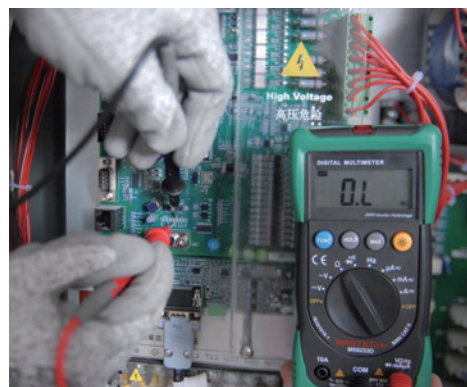
Features			
Display Counts		2000	
Autoranging	Auto & Manual		●
Diode	Open Voltage	1.5V	
Continuity Buzzer		<60Ω	<70Ω
Data Hold			●
APO	Auto Power Off		●
NCV	Non-contact Voltage Detection		●
MAX	Maximum Measurement		●
Display Backlight			●
LBD	Low Battery Display		●

General			
Power Supply	1×9V 6F22 Battery		
Product Size	140mm×67mm×30mm/5.5"×2.6"×1.2"		
Product Weight	112g/0.25lb		
Certificate	MS8223D: RoHS MS8223E: CE/ETL/RoHS		
Safety Rating	CAT II 600V		



Accessories included:

- Test Leads
- K Type Thermocouple
- Battery and User's Manual



DIGITAL MULTIMETER

- MAIN FEATURES:**
- Display 4000 Counts
 - Auto Power Off
 - Auto & Manual Ranging
 - Diode Open Voltage 1.5V
- VOLTAGE:**
DC 600V
AC 600 V
- CURRENT:**
DC 10A
AC 10A

- **MS8239C**

Specifications	Range	Resolution	MS8239C	
			Accuracy	
DC Voltage	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/0.1V/1V	±(0.5%+3)	
AC Voltage	4V/40V/400V/600V	1mV/10mV/0.1V/1V	±(1.2%+5)	
DC Current	400μA/4000μA/40mA/400mA	0.1μA/1μA/0.01mA/0.1mA	±(1.0%+5)	
	10A	0.01A	±(2.0%+10)	
AC Current	400μA/4000μA/40mA/400mA	0.1μA/1μA/0.01mA/0.1mA	±(1.2%+5)	
	10A	0.01A	±(2.5%+10)	
Resistance	400Ω/4kΩ/40kΩ	0.1Ω/1Ω/10Ω	±(0.8%+5)	
	400kΩ/4MΩ/40MΩ	0.1kΩ/1kΩ/10kΩ	±(0.8%+5)	
Capacitance	5nF/50nF/500nF	1pF/10pF/0.1nF	±(3.0%+5)	
Frequency (V / A)	5μF/50μF/100μF	1nA/10nA/0.1μA	±(3.0%+5)	
	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/1Hz	±(1.5%+5)	
Frequency (Hz/ Duty)	10Hz/100Hz/1000Hz/10kHz	0.001Hz/0.01Hz/0.1Hz/1Hz	±(1.5%+5)	
	100kHz/1000kHz/10MHz	10Hz/0.1kHz/1kHz	±(1.5%+5)	
Duty Cycle	0.1%~99%	0.1%	±(2.0%+5)	
Temperature	-20°C~1000°C / -4°F~1832°F	1°C/1°F	±(3.0%+3)	

Features			
Display Counts		4000	
Auto Ranging	Auto & Manual		●
APO	Auto Power Off		●
Diode	Open Voltage	1.5V	
Continuity Buzzer		<50±20Ω	
Data Hold			●
Display Backlight			●
LBD	Low Battery Display		●

General			
Power Supply	2×1.5V AAA Batteries		
Product Size	150mm×74mm×41mm/5.9"×2.9"×1.6"		
Product Weight	202g/0.44lb		
Certificate	CE/ETL/RoHS		
Safety Rating	CATIII 600V		



Accessories included:

- Test Leads
- K Type Thermocouple
- Battery and User's Manual

AUTO RANGE - ADVANCED

SMART



DIGITAL MULTIMETER SMART TECHNOLOGY

MAIN FEATURES:

- Display 6000 Counts
- Auto range
- Auto Power Off
- Dual Display

MS8301D

VOLTAGE:

- DC 600V
- AC 600V

MS8301D

Specifications	Range	Resolution	Accuracy
DC Voltage	6V/60V/600V	0.01V/0.1V/1V	±(0.5%+3)
AC Voltage	6V/60V/600V	0.01V/0.1V/1V	±(0.8%+5)
Resistance	2kΩ/20kΩ/200kΩ/2MΩ	0.001kΩ/0.01kΩ/0.1kΩ/0.001MΩ	±(0.8%+3)
	10MΩ	0.01MΩ	±(1.0%+5)
Frequency	60Hz/600Hz/3kHz	0.1Hz/1Hz/10Hz	±(1.0%+5)
Duty Cycle	10% ~ 90%	1%	±2.0%

Features

Display Counts		6000
Auto range	Auto	•
APO	Auto Power Off	•
Dual Display		•
Continuity Buzzer	<40Ω	•
Data Hold		•
MAX/MIN		•
Display Backlight		•
LBD	Low Battery Display	•
NCV	Non-Contact Voltage Detector	•

General

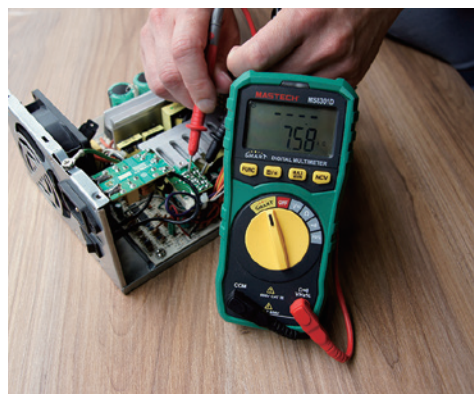
Power Supply	2×1.5V AAA Batteries
Product Size	150mm×74mm×48mm/5.9"×2.9"×1.7"
Product Weight	220g/0.48lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V

*For further information about SMART technology please check page 6.



Accessories included:

- Test Leads
- Battery and User's Manual



DIGITAL MULTIMETER

MAIN FEATURES:

- Display 4000 counts
- Manual Ranging
- Auto Ranging
- Auto Power Off

MS8250A

VOLTAGE:

- DC 600V
- AC 600V

CURRENT:

- DC 10A
- AC 10A

MS8250A

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV	0.1mV	±(0.8%+3)
	4V/40V/400V/600V	1mV/10mV/0.1V/1V	±(0.5%+5)
AC Voltage	400mV	0.1mV	±(1.0%+5)
	4V/40V/400V	1mV/10mV/0.1V	±(0.8%+5)
	600V	1V	±(1.2%+3)
DC Current	400μA/4000μA/40mA/400mA	0.1μA/1μA/10μA/0.1mA	±(0.8%+2)
	10A	10mA	±(2.0%+5)
AC Current	400μA/4000μA/40mA/400mA	0.1μA/1μA/10μA/0.1mA	±(1.5%+2)
	10A	10mA	±(3.0%+5)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/4kΩ	±(1.0%+5)
	40MΩ	10kΩ	±(1.2%+15)
Capacitance	40nF/400nF/4μF/40μF/100μF	10pF/0.1nF/1nF/10nF/0.1μF	±(3.0%+5)
Frequency	5Hz/50Hz/500Hz/5kHz	0.001Hz/0.01Hz/0.1Hz/1Hz	±(0.5%+2)
	50kHz/500kHz/5MHz	10Hz/0.1kHz/1kHz	±(0.5%+2)
Duty Cycle	0.1% ~ 99.9%	0.1%	±(2.0%+5)

Features

Display Counts		4000
Auto Ranging		•
Manual Ranging		•
APO	Auto Power Off	•
REL	Relative Measurement	•
NCV	Non-Contact Voltage Detector	•
Diode	Open Voltage	1.5V
Continuity Buzzer		<50±20Ω
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•

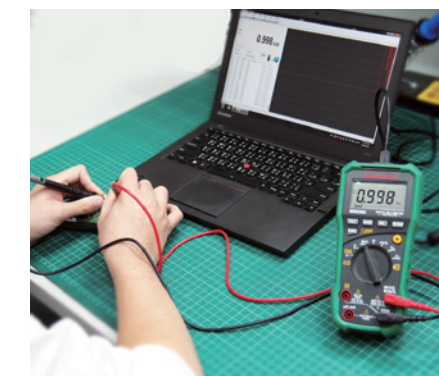
General

Power Supply	1×9V 6F22 Battery
Product Size	175mm×86mm×52mm/6.89"×3.38"×2.04"
Product Weight	372g/0.82lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT IV 600V



Accessories included:

- Test Leads
- Battery and User's Manual





DIGITAL MULTIMETER

- MAIN FEATURES:**
- Display 6600 counts
 - Auto Ranging
 - Manual Ranging
 - Auto Power Off

MS8251A

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 1000V	AC 10A

MS8251A

Specifications	Range	Resolution	Accuracy
DC Voltage	660mV	0.1mV	±(0.8%+3)
	6.6V/66V/660V	1mV/10mV/0.1V	±(0.5%+5)
	1000V	1V	±(0.8%+3)
AC Voltage	660mV(40~60Hz)	0.1mV	±(1.5%+5)
	6.6V/66V(40~400Hz)	1mV/10mV	±(1.2%+5)
	660V/1000V(40~400Hz)	0.1V/1V	±(1.0%+3)
DC Current	660µA/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.0%+5)
	10A	10mA	±(2.0%+5)
AC Current	660µA/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.5%+5)
	10A	10mA	±(3.0%+5)
Resistance	660Ω/6.6kΩ/66kΩ/660kΩ/6.6MΩ	0.1Ω/1Ω/10Ω/100Ω/1kΩ	±(0.8%+5)
	66MΩ	0.1MΩ	±(1.5%+5)
Capacitance	6.6nF	1pF	±(4.0%+5)
	66nF/660nF/6.6µF/66µF/660µF	10pF/0.1nF/1nF/10nF/0.1µF	±(3.0%+3)
	6.6mF/66mF	1µF/10µF	±(4.0%+5)
Frequency (V Position)	66Hz/660Hz/6.6kHz/10kHz	0.01Hz/0.1Hz/1Hz/10Hz	±(1.5%+5)
Frequency (Hz Position)	66Hz/660Hz/6.6kHz/66kHz/660kHz/6.6MHz/66MHz	0.01Hz/0.1Hz/1Hz/10Hz/0.1kHz/1kHz/10kHz	±(1.5%+5)
Duty Cycle	1%~99.9%	0.1%	±(2.0%)
Temperature	0~1000°C/32~1832°F	1°C/1°F	±(1.0%+3)

Features		
Display Counts		6600
Auto Ranging		•
Manual Ranging		•
APO	Auto Power Off	•
REL	Relative Measurement	•
NCV	Non-Contact Voltage Detector	•
Diode	Open Voltage	3.2V
Continuity Buzzer	<50Ω	•
MAX/MIN		•
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	175mm×85mm×52mm/6.9"×3.3"×2.1"	
Product Weight	420g/0.92lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT III 1000V/CAT IV 600V	



Accessories included:

- Test Leads
- K Type Thermocouple
- Multi-Function Socket
- Carry bag
- Battery and User's Manual



DIGITAL MULTIMETER SMARTPHONE CONNECTION

- MAIN FEATURES:**
- Display 4000 Counts
 - Auto Power Off
 - Auto & Manual Ranging
 - True RMS For AC Voltage & AC Current

MS8238H

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

MS8238H

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV/4V/40V/400V	0.1mV/0.001V/0.01V/0.1V	±(0.5%+2)
	600V	1V	±(0.8%+5)
AC Voltage	4V/40V/400V/600V	0.001V/0.01V/0.1V/1V	±(1.0%+10)
DC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/0.01mA/0.1mA	±(1.0%+10)
	10A	0.01A	±(2.0%+8)
AC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/0.01mA/0.1mA	±(1.2%+5)
	10A	0.01A	±(2.0%+8)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ/0.001MΩ	±(0.8%+3)
	40MΩ	0.01MΩ	±(1.2%+3)
Temperature	-20°C~1000°C	1°C	±(2.0%+2)
	-4°F~1832°F	1°F	±(2.0%+4)

Features		
Display Counts		4000
Auto range	Auto & Manual	•
APO	Auto Power Off	•
True RMS	For AC Voltage & AC Current	•
Continuity Buzzer	<50Ω	•
Diode	Open Voltage	3.2V
Data Hold		•
LBD	Low Battery Display	•
NCV	Non-Contact Voltage Detector	•
Battery Tester	1.5V/9V	•
Wireless	APP connection	•

General		
Power Supply	1×9V 6F22 Battery	
Product Size	148mm×73.5mm×50mm / 5.8"×2.9"×1.96"	
Product Weight	241g/0.53lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT III 600V	

*For further information about SMARTPHONE Connection please check page 4.



Accessories included:

- Test Leads
- K Type Thermocouple
- Battery and User's Manual





DIGITAL MULTIMETER SMARTPHONE CONNECTION

MAIN FEATURES:

- Display 4000 counts
- Auto & Manual range
- Auto Power Off
- True RMS For AC Voltage & AC Current

■ MS8361D

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV/4V/40V/400V	0.1mV/0.001V/0.01V/0.1V	±(0.8%+3)
	600V	1V	±(1.0%+5)
AC Voltage	400mV/4V/40V/400V	0.1mV/0.001V/0.01V/0.1V	±(1.0%+8)
	600V	1V	±(1.2%+8)
DC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/0.01mA/0.1mA	±(1.0%+10)
	10A	0.01A	±(2.0%+5)
AC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/0.01mA/0.1mA	±(1.5%+5)
	10A	0.01A	±(3.0%+5)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)
	40MΩ	0.001MΩ/0.01MΩ	±(1.5%+5)
Capacitance	9.999nF	0.001nF	±(5.0%+5)
	99.99nF/999.9nF/9.99µF/99.99µF/999.9µF/9.999mF/99.99mF	0.01nF/0.1nF/0.001µF/0.01µF/0.1µF/0.001mF/0.01mF	±(4.0%+5)
Frequency (V)	99.99Hz/999.9Hz/9.999kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)
	> 10kHz	0.01kHz	
Frequency (A)	99.99Hz/999.9Hz	0.01Hz/0.1Hz	±(1.5%+5)
	> 1kHz	0.001kHz	
Frequency (Hz/Duty)	9.999Hz/99.99Hz/999.9Hz/9.999kHz/99.99kHz/999.9kHz/9.999MHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz/0.01kHz/0.1kHz/0.001MHz	±(0.3%+5)
	0.1%~99.9%	0.1%	±3.0%

Features		
Display Counts		4000
Auto range	Auto & Manual	•
APO	Auto Power Off	•
True RMS	For AC Voltage & AC Current	•
Continuity Buzzer	<50Ω	•
Diode	Open Voltage	3.2V
hFE	0~1000	•
Data Hold		•
Display Backlight		•
REL	Relative measurement	•
LBD	Low Battery Display	•
NCV	Non-Contact Voltage Detector	•
Wireless	APP connection	•

General	
Power Supply	1×9V 6F22 Battery
Product Size	188mm×92mm×50mm/7.4"×3.6"×2.0"
Product Weight	380g/0.83lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Multi-Function Socket
- Baattery and User's Manual

*For further information about SMARTPHONE Connection please check page 4.



TRMS DIGITAL MULTIMETER

MAIN FEATURES:

- Auto & Manual range
- True RMS For AC Voltage & AC Current

■ MS8251B

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 1000V	AC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	660mV	0.1mV	±(0.8%+3)
	6.6V/66V/660V	1mV/10mV/0.1V	±(0.5%+5)
AC Voltage	1000V	1V	±(0.8%+3)
	660mV(40~60Hz)	0.1mV	±(1.5%+5)
	6.6V/66V(40~400Hz)	1mV/10mV	±(1.2%+5)
DC Current	660µV/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.0%+5)
	10A	10mA	±(2.0%+5)
AC Current	660µA/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.5%+5)
	10A	10mA	±(3.0%+5)
Resistance	660Ω/6.6kΩ/66kΩ/660kΩ/6.6MΩ	0.1Ω/1Ω/10Ω/100Ω/1kΩ	±(0.8%+5)
	66MΩ	0.1MΩ	±(1.5%+5)
Capacitance	6.6nF	1pF	±(4.0%+5)
	66nF/660nF/6.6µF/66µF/660µF	10pF/0.1nF/1nF/10nF/0.1µF	±(3.0%+3)
Frequency (V Position)	6.6mF/66mF	1µF/10µF	±(4.0%+5)
	66Hz/660Hz/6.6kHz/10kHz	0.01Hz/0.1Hz/1Hz/10Hz	±(1.5%+5)
Frequency (Hz Position)	66Hz/660Hz/6.6kHz/66kHz/660kHz/6.6MHz/66MHz	0.01Hz/0.1Hz/1Hz/10Hz/0.1kHz/1kHz/10kHz	±(1.5%+5)
	0.1kHz/1kHz/10kHz		
Duty Cycle	1%~99.9%	0.1%	±(2.0%)
Temperature	0~1000°C/32~1832°F	1°C/1°F	±(1.0%+3)

Features		
Display Counts		6600
Auto Ranging		•
Manual Ranging		•
APO	Auto Power Off	•
REL	Relative Measurement	•
NCV	Non-Contact Voltage Detector	•
Diode	Open Voltage	3.2V
Continuity Buzzer	<50Ω	•
MAX/MIN		•
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•
True RMS	True Root Mean Square	•
Low Z	Low Impedance Input Mode	•

General	
Power Supply	1×9V 6F22 Battery
Product Size	175mm×85mm×52mm/6.9"×3.3"×2.1"
Product Weight	420g/0.92lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V/CAT IV 600V



Accessories included:

- Test Leads
- K Type Thermocouple
- Multi-Function Socket
- Carry bag
- Battery and User's Manual





TRMS DIGITAL MULTIMETER

MS8250D

MAIN FEATURES:

- Display 6600 counts
- Auto Ranging
- Manual Ranging
- True RMS

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 1000V	AC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	660mV	0.1mV	±(0.8%+3)
	6.6V/66V/660V/1000V	1mV/10mV/0.1V/1V	±(0.5%+5)
AC Voltage	660mV	0.1mV	±(1.5%+5)
	6.6V/66V 660V/1000V	1mV/10mV 0.1V/1V	±(1.2%+5) ±(1.0%+3)
DC Current	660µA/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.0%+5)
	10A	10mA	±(2.0%+5)
AC Current	660µA/6600µA/66mA/660mA	0.1µA/1µA/10µA/0.1mA	±(1.5%+5)
	10A	10mA	±(3.0%+5)
Resistance	660Ω/6.6kΩ/66kΩ/660kΩ/6.6MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ	±(0.8%+5)
	66MΩ	10kΩ	±(1.5%+5)
Capacitance	6.6nF	1pF	±(4.0%+5)
	66nF/660nF/6.6µF/66µF/660µF	10pF/0.1nF/1nF/10nF/0.1µF	±(3.0%+3)
	6.6µF/66µF	1µF/10µF	±(4.0%+5)
Frequency	66Hz/660Hz/6.6kHz/66kHz	0.01Hz/0.1Hz/1Hz/10Hz	±(1.5%+5)
	660kHz/6.6MHz/66MHz	0.1kHz/1kHz/10kHz	±(1.5%+5)
Duty Cycle	0.1%~99.9%	0.1%	±(2.0%+5)

Features

Display Counts		6600
Auto Ranging		•
Manual Ranging		•
APO	Auto Power Off	•
REL	Relative Measurement	•
True RMS	True Root Mean Square	•
NCV	Non-Contact Voltage Detector	•
Diode	Open Voltage	3.2V
Continuity Buzzer		<50Ω
MAX/MIN		•
Bar Graph		•
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•
USB Interface	Windows OS	•

General

Power Supply	1×9V 6F22 Battery
Product Size	175mm×86mm×52mm/6.89"×3.38"×2.04"
Product Weight	372g/0.82lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V/CAT IV 600V

DIGITAL MULTIMETER ENVIRONMENTAL FUNCTIONS

MS8209

MAIN FEATURES:

- Display 4000 counts
- Auto Power Off
- Auto & Manual Ranging
- Diode Open Voltage 1.5V

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/100mV/1V	±(0.7%+2)
	AC Voltage	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/100mV/1V
DC Current	40mA/400mA	10µA/100µA	±(1.2%+3)
	10A	10mA	±(2.0%+10)
AC Current	40mA/400mA	10µA/100µA	±(1.5%+5)
	10A	10mA	±(3.0%+10)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/100Ω/1kΩ	±(1.2%+2)
	40MΩ	10kΩ	±(2.0%+5)
Capacitance	4nF/40nF/400nF	1pF/10pF/0.1nF	±(3.0%+3)
	4µF/40µF/200µF	1nF/10nF/100nF	±(3.0%+3)
Frequency	10Hz	0.001Hz	±(2.0%+5)
	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/1Hz	±(1.5%+5)
	100kHz/200kHz	10Hz/100Hz	±(2.0%+5)
Duty Cycle	>200kHz	0.1kHz	Reference
	0.1%~99.9%	0.1%	±(3.0%)
Temperature (K-Type)	-20°C~0°C	1°C	±(5.0%+5)
	0°C~400°C	1°C	±(1.0%+3)
	400°C~1000°C	1°C	±(2.0%+3)
Relative Humidity	30%~90%	0.1%	±5.0%RH
Sound Level	35dB~100dB (±3.5dB @94dB 1kHz sine wave)	0.1dB	±(3.5%)
Luminosity	4000Lux/40000Lux	1Lux/10Lux	±(5.0%+10)

Features

Display Counts		4000
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Diode	Open Voltage	1.5V
Continuity Buzzer	<40Ω	•
REL	Relative Measurement	•
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•

General

Power Supply	1×9V 6F22 Battery
Product Size	158mm×78mm×39mm/6.2"×3.1"×1.5"
Product Weight	260g/0.55lb
Certificate	RoHS
Safety Rating	CAT III 600V

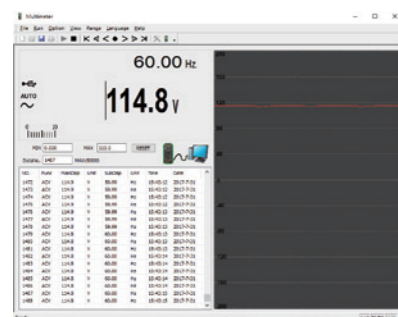
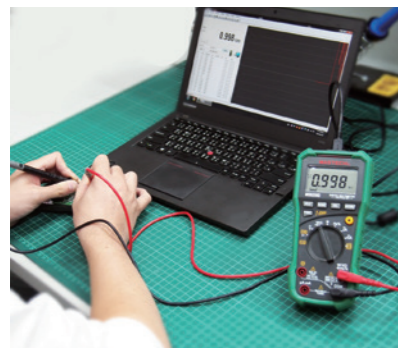


Accessories included:

- Test Leads
- USB Interface Cable
- Software CD
- Battery and User's Manual

Accessories included:

- Test Leads
- K Type Thermocouple
- Carry Bag
- Battery and User's Manual





DIGITAL MULTIMETER ENVIRONMENTAL FUNCTIONS

MAIN FEATURES: **■ MS8229**

- Display 4000 counts
- Auto & Manual Ranging
- Auto Power Off
- Diode Open Voltage 1.5V

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

MS8229

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/0.1V/1V	±(0.7%+2)
AC Voltage	400mV/4V/40V/400V	0.1mV/1mV/10mV/0.1V	±(0.8%+3)
	600V	1V	±(1.0%+3)
DC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/10µA/0.1mA	±(1.2%+3)
	4A/10A	1mA/10mA	±(2.0%+10)
AC Current	400µA/4000µA/40mA/400mA	0.1µA/1µA/10µA/0.1mA	±(1.5%+5)
	4A/10A	1mA/10mA	±(3.0%+10)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ	±(1.2%+2)
	40MΩ	10kΩ	±(2.0%+5)
Capacitance	40nF/400nF/4µF/40µF/100µF	0.01nF/0.1nF/1nF/10nF/0.1µF	±(3.0%+3)
	10Hz	0.001Hz	±(2.0%+5)
Frequency	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/1Hz	±(1.5%+5)
	100kHz/200kHz	10Hz/0.1kHz	±(2.0%+5)
	>200kHz	0.1kHz	Reference
Duty Cycle	0.1%~99.9%	0.1%	±(3.0%)
	-20°C~0°C	1°C	±(5.0%+3)
Temperature (K-Type)	1°C~400°C	1°C	±(1.0%+2)
	401°C ~1000°C	1°C	±(2.0%)
	-4°F~32°F	1°F	±(5.0%+6)
	33°F~752°F	1°F	±(1.0%+4)
	753°F~1832°F	1°F	±(2.0%)
Environment	0°C~40°C	0.1°C	±(2.0°C)
	32°F~104°F	0.1°F	±(4.0°F)
Relative Humidity	20%~95%	0.10%	±(5.0%)
Sound Level	40dB~100dB	0.1dB	±(3.5%)
Luminosity	4000Lux/40000Lux	1Lux/10Lux	±(5.0%+10)

Features

Display Counts	4000
Auto Ranging	Auto & Manual
APO	Auto Power Off
°C/°F Selection	
Diode	Open Voltage 1.5V
Continuity Buzzer	<50±20Ω
Data Hold	
LBD	Low Battery Display
Display Backlight	
Sound & Light Warning	For Incorrectly Inserting the Input Plugs (S Version only)

General

Power Supply	3×1.5V AAA Battery
Product Size	195mm×92mm×55mm/7.7"×3.6"×2.2"
Product Weight	390g/0.86lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- K Type Thermocouple
- Battery and User's Manual



AUTOMOTIVE DIGITAL MULTIMETER

MAIN FEATURES: **■ MS8239D**

- Display 2000 Counts
- Auto Power Off
- Auto & Manual ranging
- Diode Open Voltage 2.7V

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

MS8239D

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V/600V	0.1mV/1mV/10mV/100mV/100mV	±(0.7%+2)
AC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/100mV	±(0.8%+3)
	600V	100mV	±(1.0%+3)
DC Current	10A	0.01A	±(2.0%+10)
AC Current	10A	0.01A	±(3.0%+10)
Resistance	200Ω	0.1Ω	±(1.0%+3)
	2kΩ/20kΩ/200kΩ/2MΩ	0.001kΩ/0.01kΩ/0.1kΩ/0.001MΩ	±(1.0%+1)
	20MΩ	0.01MΩ	±(1.0%+5)
DWELL Test	4CYL/6CYL/8CYL	0.1°	±(3.0°)
TACH Test	4CYL/6CYL/8CYL	10RPM	±(3.0%+3)

Features

Display Counts	2000
Auto ranging	Auto & Manual
APO	Auto Power Off
Diode	Open Voltage 2.7V
Continuity Buzzer	<50Ω
Data Hold	
MAX	Maximum Measurement
Display backlight	
LBD	Low Battery Display

General

Power Supply	2×1.5V AAA Batteries
Product Size	150mm×74mm×41mm/5.9"×2.9"×1.6"
Product Weight	202g/0.44lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



ENGINE ANALYZER



Accessories included:

- Test Leads
- Battery and User's Manual



DIGITAL MULTIMETER WITH CABLE TRACKER

MAIN FEATURES:

- Display 2000 counts
- Auto & Manual Ranging
- Auto Power Off
- Non-Contact Voltage Detector

■ MS8236

VOLTAGE:	CURRENT:
DC 600V	DC 10A
AC 600V	AC 10A

MS8236

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V/600V	0.1mV/1mV/10mV/100mV/1V	±(0.5%+5)
AC Voltage	200mV/2V/20V/200V/600V	0.1mV/1mV/10mV/100mV/1V	±(0.8%+5)
DC Current	200µA/2000µA/20mA/200mA 2A/10A	0.1µA/1µA/10µA/0.1mA 1mA/10mA	±(1.2%+5) ±(2.0%+10)
AC Current	200µA/2000µA/20mA/200mA 2A/10A	0.1µA/1µA/10µA/0.1mA 1mA/10mA	±(1.5%+5) ±(3.0%+10)
Resistance	200Ω/2kΩ/20kΩ/200kΩ 2MΩ/20MΩ	0.1Ω/1Ω/10Ω/100Ω 1kΩ/10kΩ	±(1.0%+5) ±(1.5%+5)

Features

Display Counts		2000
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
NCV	Non-Contact Voltage Detector	•
Diode	Open Voltage	1.7V
Continuity Buzzer	<70Ω	•
MAX	Maximum Measurement	•
Data Hold		•
LBD	Low Battery Display	•
Display Backlight		•
Network Cable Check	-Test for open circuits, shorts, miswires, reversals, split pairs, shield detection. -Main unit and one remote allow one person testing of T568A, T568B, 10Base-T. -Debug mode for detailed fault identification result.	•
Phone Check	-Identify the state in the working telephone line: Busy, Ringing or Clear	•
Tone	-Judge the continuity of cables or wires. -Track the cables or wires and diagnose the break point.	•

General

Model Number	MS8236
Power Supply	2×9V 6F22 Batteries
Product Size	195mm×92mm×55mm/7.7"×3.6"×2.2" 238mm×43mm×26mm/9.4"×1.7"×1.0"
Product Weight	470g/1.04lb
Certificate	RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Protective Cover
- Detection Connect Line
- Receiver
- Battery and User's Manual



INSULATION TEST. SMARTPHONE CONNECTION

MAIN FEATURES:

- Display 6600 counts
- True RMS For AC Voltage & AC Current
- Auto Ranging
- Insulation test

■ MS5206

VOLTAGE:	OUTPUT:
DC 1000V	DC 1000V
AC 660V	

MS5206

Specifications	Range	Resolution	Accuracy
DC Voltage	6.6V/66V/660V/1000V	0.001V/0.01V/0.1V/1V	±(1.0%+5)
AC Voltage	6.6V/66V/660V	0.001V/0.01V/0.1V	±(3.0%+5)
Resistance	20Ω/200Ω/2kΩ/20kΩ/ 200kΩ	0.01Ω/0.1Ω/1Ω/0.01kΩ/ 0.1kΩ	±(3.0%+10)

Insulation Function

Output Voltage	Range	Resolution	Test Current	Accuracy
50V (0~20%)	0MΩ~20MΩ	0.01MΩ	1mA@50k	±(2.0%+5)
	20MΩ~50MΩ	0.1MΩ		
100V (0~20%)	0MΩ~20MΩ	0.01MΩ	1mA@100k	±(2.0%+5)
	20MΩ~100MΩ	0.1MΩ		
250V (0~20%)	0MΩ~20MΩ	0.01MΩ	1mA@250k	±(2.0%+5)
	20MΩ~200MΩ	0.1MΩ		
	200MΩ~500MΩ	1MΩ		
500V (0~20%)	0MΩ~20MΩ	0.01MΩ	1mA@500k	±(2.0%+5)
	20MΩ~200MΩ	0.1MΩ		
	200MΩ~500MΩ	1MΩ		
1000V (0~20%)	0MΩ~200MΩ	0.1MΩ	1mA@1000k	±(2.0%+5)
	200MΩ~2000MΩ	1MΩ		
	2G~10GΩ	0.1GΩ		

Features

Display Counts		6600
Auto Ranging	Auto	•
APO	Auto Power Off	•
True RMS	For AC Voltage & AC Current	•
MAX/MIN		•
DAR/PI	For Insulation Mode	•
COMPARE		•
Lock		•
Display Backlight		•
LBD	Low Battery Display	•
Wireless	APP connection	•

General

Power Supply	4×1.5V AA Batteries
Product Size	205mm×102mm×58mm/8.1"×4.0"×2.3"
Product Weight	390g/0.86lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V

*For further information about SMARTPHONE Connection please check page 4.



Accessories included:

- Test Leads
- Test Clips
- Carry Bag
- Battery and User's Manual





DIGITAL MULTIMETER WITH INSULATION TEST

MAIN FEATURES:
 - Display 6600 counts - TRMS
 - Up to 1kV - 2 GΩ

MS5208

VOLTAGE: DC 1000V AC 750V
CURRENT: DC 400mA AC 400mA
OUTPUT: DC 1000V

Specifications	Range	Resolution	Accuracy
DC Voltage	660mV/6.6V/66V/660V/1000V	0.1mV/1mV/10mV/0.1V/1V	±(0.5%+5)
AC Voltage	660mV/6.6V/66V/660V/750V	0.1mV/1mV/10mV/0.1V/1V	±(1.5%+30)
DC Current	66mA/400mA	10µA/0.1mA	±(1.0%+5)
AC Current	66mA/400mA	10µA/0.1mA	±(1.5%+30)
Resistance	660Ω/6.6kΩ/66kΩ/660kΩ	0.1Ω/1Ω/10Ω/0.1kΩ	±(1.2%+5)
	6.6MΩ/66MΩ	1kΩ/10kΩ	±(2.0%+20)
Capacitance	66nF/660nF/6.6µF/66µF	10pF/0.1nF/1nF/10nF	±(5.0%+20)
	660µF/6.6mF/66mF	0.1µF/1µF/10µF	±(5.0%+20)
Frequency	660.0Hz/6.600kHz/66.00kHz	0.1Hz/1Hz/10Hz	±(1.5%+5)
	>10kHz	10Hz	Reference
Temperature	-30°C~1300°C	1°C	±(1.0%+2)
	-22°F~2372°F	1°F	±(1.0%+4)

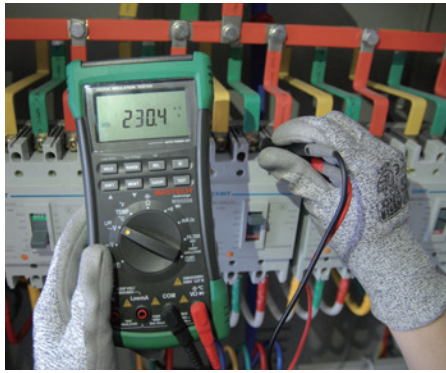
Output Voltage	Range	Resolution	Test Current	Accuracy
50V (0~20%)	0M~5MΩ	0.01MΩ	1mA@50k	±(3.0%+5)
	5M~50MΩ	0.1MΩ		
100V (0~20%)	0M~5MΩ	0.01MΩ	1mA@100k	±(3.0%+5)
	5M~100MΩ	1MΩ		
250V (0~20%)	0M~25MΩ	0.1MΩ	1mA@250k	±(3.0%+5)
	25M~250MΩ	1MΩ		
500V (0~20%)	0M~50MΩ	0.1MΩ	1mA@500k	±(3.0%+5)
	50M~500MΩ	1MΩ		
1000V (0~20%)	0M~50MΩ	0.1MΩ	1mA@1000k	±(3.0%+5)
	50M~500MΩ	1MΩ		
	0.5G~2.0GΩ	0.1GΩ		±(5.0%+5)

Features		
Display Counts		6600
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
True RMS	For AC Voltage & AC Current	•
DAR/PI	For Insulation Mode	•
REL	Relative Measurement	•
Continuity Buzzer	<30Ω	•
Diode	Open Voltage	2.4V
LPF	Low Pass Filter Function (1kHz)	•
Data Logging	100 Groups	•
LBD	Low Battery Display	•
LOCK / Data Recording / MAX/MIN/AVG / Data Hold / Display Backlight		•

General			
Power Supply	4×1.5V AA Batteries	Product Weight	390g/0.86lb
Product Size	205mm×102mm×58mm/8.1"×4.0"×2.3"		
Safety Rating	CAT III 1000V	Certificate	CE/ETL/RoHS



- Accessories included:**
- Test Leads
 - Test Clips
 - K Type Thermocouple
 - Multi-Function Socket
 - Carry Bag
 - Battery and User's Manual



DIGITAL MULTIMETER

MAIN FEATURES:
 - Display 8 digits (22000 counts), about 10mm high red LED display with decimal point
 - Power Requirement AC 198~264V 50/60Hz / AC 90~132V

MS6100

A INPUT: 10Hz~100MHz
B INPUT: 100MHz~1300MHz

Channel	Range	Resolution	Accuracy
A	10MHz (10Hz~10MHz)	1,10,100Hz selectable	±1 count ±1x10 ⁻⁵ x frequency (month) ±1 count ±5x10 ⁻⁶ x frequency (minute)
	100MHz (10MHz~100MHz)	10,100,1000Hz selectable	
B	1300MHz (100MHz~1300MHz)	100Hz,1kHz,10kHz selectable	

Channel	Range	Resolution	Accuracy
A (only)	0.1S~0.1µS (10Hz~10MHz)	0.0µS 0.00µS 0.000µS selectable	±1 count ±1x10 ⁻⁵ x frequency (month) ±1 count ±5x10 ⁻⁶ x frequency (minute)

Channel	Range	Resolution
A (only)	10Hz~10MHz	1 count input

Channel A	MAX Input Voltage: 250V RMS / Impedance: 1MΩ less than 35pF
Channel B	MAX Input Voltage: 3V RMS / Impedance: 50Ω

Display Counts	8 digits (22000 count), about 10mm high red LED display with decimal point
Power Requirement	AC 198~264V 50/60Hz AC 90~132V 50/60Hz
Temperature	Operating: 0°C~40°C Storage: -10°C~50°C
Relative Humidity	20%~80%RH (0°C~40°C)
Low Pass Filter	~100kHz, -3dB ~150kHz, -3dB at ATTN condition
Data Hold	•
Self Check	•
Overrange Indications	•
OSC. Out	10MHz

Power Supply	220V/110V AC
Product Size	300mm×260mm×74mm/11.8"×10.2"×2.9"
Product Weight	1850g/4.02lb
Certificate	CE/ETL/RoHS



- Accessories included:**
- BNC to BNC Test Lead (50 ohm, 100cm)
 - Power Cord
 - User's Manual



DIGITAL MULTIMETER

MAIN FEATURES:

- Dual Display 22000 counts and 44 Segments Bars Graph
- Auto & Manual Ranging
- True RMS for AC Voltage & AC Current

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 750V	AC 10A

■ MS8040

MS8040 22000 Counts High Precision Desktop Digital Multimeter with AC True RMS & LPF & RS232 Data Communication has a wide range of applications in labs, factories, and work rooms. With high resolution for the measurement of voltage and current. The precision of DC voltage and current even reaches up to 0.05%. The MS8040 offers two power supply options and RS232 data communication interface, satisfying all your needs. And it has the low-pass filter (LPF) to effectively reduce high-frequency noise when measuring AC voltage.



Accessories included:

- Test Leads
- RS232C Cable
- K Type Thermocouple
- Multi-Function Socket
- Power Cord
- Software CD
- User's Manual

MS8040

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V/1000V	0.01mV/0.1mV/1mV/10mV/0.1V	±(0.05%+6)
AC Voltage	200mV/2V/20V/200V/750V	(40Hz~60Hz)	±(0.5%+30)
		(60Hz~5kHz)	±(1.5%+30)
		(5kHz~10kHz)	±(2.5%+30)
DC Current	200µA/2mA/20mA/200mA	0.01µA/0.1µA/1µA/10µA	±(0.15%+15)
	10A	1mA	±(0.5%+15)
AC Current	200µA/2mA/20mA/200mA	(40Hz~60Hz)	±(0.8%+30)
		(60Hz~1kHz)	±(1.0%+30)
		(1kHz~5kHz)	±(1.0%+30)
	10A	(40Hz~60Hz)	±(1.5%+30)
		(60Hz~1kHz)	±(1.2%+30)
		(1kHz~5kHz)	±(2.0%+30)
Resistance	200Ω/2kΩ	0.01Ω/0.1Ω	±(0.1%+10)
	20kΩ/200kΩ	1Ω/10Ω	±(0.1%+5)
	2MΩ	0.1kΩ	±(0.1%+10)
	20MΩ	1kΩ	±(0.5%+10)
	200MΩ	10kΩ	±(2%+10)
Capacitance	2nF/200nF/2µF/20µF	0.1pF/10pF/0.1nF/1nF	±(1.2%+30)
	200µF/2000µF/20mF	10nF/0.1µF/1µF	±(2.2%+30)
Logic Frequency	20Hz~220MHz	1Hz	±(0.06%+10)
Temperature	-30°C~1300°C	1°C	±(1.0%+2)
	-22°F~2372°F	1°F	±(1.0%+4)
Duty Cycle	5%~95%	0.10%	±(10.0%)
Clamp DC Current	220A/2200A	0.01A/0.1A	±(0.1%+10)
Clamp AC Current	220A/2200A (50Hz~60Hz)	0.01A/0.1A	±(1.0%+30)

Features

Dual Display	22000 counts and 44 Segments Bars Graph
Auto Ranging	Auto & Manual
Auto Power Off	•
True RMS	For AC Voltage & AC Current
Low pass filter (1kHz)	For AC Voltage & AC Current
Relative Measurement	•
Peak Measurement	•
Diode	2.8V
Continuity Buzzer	<30Ω
MAX/MIN	•
Data Hold	•
Display Backlight	•
USB Interface	Windows OS

General

Power Supply	220V or 110V AC (50~60Hz)
Product Size	238mm×230mm×83mm/ 9.4"×9.1×3.3"
Product Weight	1500g/3.4lb
Certification	CE/ETL/RoHS
Safety Rating	CAT II 1000V

DIGITAL MULTIMETER

MAIN FEATURES:

- Display VFD 53000 counts
- Auto & Manual Ranging
- True RMS

VOLTAGE:	CURRENT:
DC 1000V	DC 10A
AC 1000V	AC 10A

■ MS8050

MS8050 is a bench model DMM product that has high accuracy and high stability. It can operate for several ten measurement functions. It's five digits count up to 53000. Not only DC, AC RMS, but DC and AC mixture signals RMS can be measured for 1000V or 10A. The resolution of DCV is 1uV and the frequency band of voltage or current is about 20kHz. It has a memory function up to 30 full screens for saving test data, has a color fluorescent double digital display screen. The meter has a light-coupling RS-232C interface and a computer software, can display, draw, record all test processes on a computer. The graphic software has an exclusive dynamic scale, which can describe very small changes of electric parameters. MS8050 together with a computer becomes a very useful measurement recorder. The protection functions against some error operations get its safety characteristic guaranteed. It is the best choice for factories, science research organizations, and laboratories in universities.



Accessories included:

- Test Leads
- RS232C Cable
- Alligator Clip
- Carrying Strap
- Power Cord
- Software CD
- User's Manual

MS8050			
Specifications	Range	Resolution	Accuracy
DC Voltage	50mV	0.001mV	±(0.03%+10)
	500mV/5V/50V/ 500V/1000V	0.01mV/0.1mV/1mV/ 10mV/0.1V	±(0.03%+6)
	50mV/500mV/5V/ 50V/500V/1000V (40Hz~1kHz)	0.001mV/0.01mV/0.1mV/ 1mV/10mV/0.1V	±(0.5%+40)
AC Voltage	50mV/500mV/5V/ 50V/500V (1kHz~10kHz)	0.001mV/0.01mV/0.1mV/ 1mV/10mV	±(1.0%+40)
	1000V (1kHz~10kHz)	0.1V	unspecified
	50mV/500mV/5V/ 50V (10kHz~20kHz)	0.001mV/0.01mV/0.1mV/ 1mV	±(2.5%+40)
DC Current	500µA	0.01µA	±(15%+15)
	5mA/50mA/500mA	0.1µA/1µA/10µA	±(15%+10)
	5A/10A	0.1mA/1mA	±(0.5%+10)
AC Current	500µA/50mA/5A (40Hz~1kHz)	0.01µA/1µA/0.1mA	±(0.75%+20)
	5000µA/500mA/10A (40Hz~1kHz)	0.1µA/10µA/1mA	±(0.75%+10)
	500µA/50mA/5A (1kHz~10kHz)	0.01µA/1µA/0.1mA	±(1.0%+20)
	5000µA/500mA/10A (1kHz~10kHz)	0.1µA/10µA/1mA	±(1.0%+10)
	500µA/50mA/5A (10kHz~20kHz)	0.01µA/1µA/0.1mA	±(2.0%+20)
	5000µA/500mA (10kHz~20kHz)	0.1µA/10µA	±(2.0%+10)
Resistance	500Ω	0.01Ω	±(0.1%+10)
	5kΩ/50kΩ/500kΩ	0.1Ω/1Ω/10Ω	±(0.1%+5)
	5MΩ	0.1kΩ	±(0.1%+10)
	50MΩ	1kΩ	±(0.5%+10)
Capacitance	50nF/500nF	1pF/10pF	±(1.0%+15)
	5µF/50µF	0.1nF/1nF	±(1.0%+10)
	500µF/5000µF	10nF/0.1µF	±(2.0%+10)
Logic Frequency	5Hz~2MHz	1Hz	±(0.006%+4)
Duty Cycle	10%~90%	0.01%	±(10.0%)
Linear Frequency	5Hz~200kHz	1Hz	±(0.006%+4)
Features			
Display VFD	53000 counts		
Auto Ranging	Auto & Manual		
Auto Power Off	•		
True RMS	•		
Relative Measurement	•		
Diode	Open Voltage: 3.3V		
Continuity Buzzer	<50±20Ω		
dBm Measurement	•		
MAX/MIN/AVG	•		
Data Hold	•		
Data Logging	30 groups		
PC Analysis Software	•		
USB Interface	Windows OS		
General			
Power Supply	220V/110V AC		
Product Size	350mm×240mm×100mm/13.8"×9.5"×3.9"		
Product Weight	2500g/5.5lb		
Certificate	RoHS		
Safety Rating	CAT II 1000V		

Digital Clamp Meters

AC current | AC/DC current | Leakage | Power
Special application | Line splitters



AC CLAMP METER SMART TECHNOLOGY

■ MS2033A

MAIN FEATURES:
- Dual display with backlight - Auto Hold, Max/Min hold
- Continuity detection - Low battery display

JAW SIZE: Ø 26 mm / 1.0"
VOLTAGE: DC 600V
AC 600V
CURRENT: AC 600A

Specifications	Range	Resolution	Accuracy
DC Voltage	6V/60V/600V	0.01V/0.1V/1V	±(0.5%+3)
AC Voltage	6V/60V/600V	0.01V/0.1V/1V	±(0.8%+5)
AC Current	2A/20A/200A 600A	0.01A/0.01A/0.1A 1A	±(2.5%+8) ±(3.0%+10)
Resistance	2kΩ/20kΩ/200kΩ/2MΩ 10MΩ	0.001kΩ/0.01kΩ/0.1kΩ/0.001MΩ 0.01MΩ	±(0.8%+3) ±(1.0%+5)
Frequency (Clamp)	60Hz/600Hz/3kHz	0.1Hz/1Hz/10Hz	±(1.0%+5)
Frequency (Plug)	60Hz/600Hz/3kHz	0.1Hz/1Hz/10Hz	±(1.0%+5)
Duty Cycle	10% ~ 90%	1%	±2.0%

Features		
Display Counts		6000
Jaw Opening		Ø26mm/1.0"
Auto range	Auto	•
APO	Auto Power Off	•
Dual Display		•
Continuity Buzzer	<40Ω	•
A Hold	Data Auto hold	•
MAX/MIN		•
Display Backlight		•
LBD	Low Battery Display	•

General	
Power Supply	3×1.5V AAA Batteries
Product Size	204mm×78mm×43mm/8"×3.07"×1.77"
Product Weight	195g/0.43lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V

*For further information about SMART technology please check page 6.



Accessories included:

- Test Leads
- Battery and User's Manual





AC CLAMP METER SMALL JAW

MAIN FEATURES:

- Diode and Continuity detection
- Data Hold
- Low battery display

JAW SIZE: Ø 28 mm / 1.1"	VOLTAGE: DC 600V AC 600 V	CURRENT: AC 600A
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- **MS2030**
- **MS2030B**

Specifications	Range	Resolution	Accuracy	
			MS2030	MS2030B
DC Voltage	600V	1V	±(1.0%+3)	
	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/0.1V/1V		±(0.8%+3)
AC Voltage	600V	1V	±(1.5%+10)	
	400mV/4V/40V/400V/600V	0.1mV/1mV/10mV/0.1V/1V		±(1.0%+5)
AC Current	2A/20A	1mA/10mA	±(2.0%+10)	
	200A	0.1A		
	400A	1A	±(2.0%+5)	
Resistance	4A/40A/400A/600A	1mA/10mA/0.1A/1A		±(2.5%+5)
	2kΩ	1Ω	±(1.0%+5)	
	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ		±(1.0%+5)
Capacitance	40MΩ	10kΩ		±(2.0%+5)
	5nF	1pF		±(4.0%+5)
Frequency	50nF/500nF/5μF/50μF/100μF	10pF/0.1nF/1nF/10nF/0.1μF		±(3.0%+3)
	50Hz/500Hz/5kHz/10kHz	0.01Hz/0.1Hz/1Hz/10Hz		±(1.0%+5)
Duty Cycle	0.1%~99.9%	0.1%		±(2.0%)
Temperature	-20°C~1000°C	1°C		±(3.0%+3)
	-4°F~1832°F	1°F		±(3.0%+3)

Features

Display Counts		2000	4000
Jaw Opening		Φ28mm/1.1"	Φ28mm/1.1"
Auto Ranging	Auto & Manual		•
APO	Auto Power Off		•
Diode	Open Voltage	4.5V	1.5V
Continuity	Continuity Buzzer	<70Ω	<50±20Ω
Data Hold		•	•
Backlight	Display Backlight		•
Work Light			•
NCV	Non-Contact Voltage Detector		•
LBD	Low Battery Display		•

General

Power Supply	3×1.5V AAA Batteries
Product Size	198mm×79mm×38mm/7.8"×3.1"×1.5"
Product Weight	195g/0.43lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



- Accessories included:**
- Test Leads
 - K Type Thermocouple (MS2030B)
 - Carry Bag
 - Battery and User's Manual



AC CLAMP METER 1000A

MAIN FEATURES:

- Diode and Continuity detection
- Data Hold
- Low battery display

JAW SIZE: Ø 50 mm / 2.0"	VOLTAGE: DC 1000V AC 750 V	CURRENT: AC 1000A
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- **M266**
- **M266C**
- **M266F**

Specifications	Range	Resolution	Accuracy		
			M266	M266C	M266F
DC Voltage	200mV	0.1mV		±(0.5%+1)	
	2V/20V/200V	1mV/10mV/0.1V		±(0.5%+3)	±(0.5%+3)
AC Voltage	1000V	1V	±(0.8%+3)	±(0.8%+3)	±(0.8%+3)
	200V	0.1V		±(1.0%+5)	±(1.0%+5)
AC Current	750V	1V	±(1.2%+5)	±(1.2%+5)	±(1.2%+5)
	20A	10mA		±(4.0%+5)	
Resistance	200A	0.1A	±(2.5%+5)	±(2.5%+5)	±(2.5%+5)
	1000A	1A	±(3.0%+10)	±(3.0%+10)	±(3.0%+10)
	200Ω	0.1Ω	±(1.0%+5)	±(1.0%+5)	±(1.0%+5)
Frequency	2kΩ	1Ω			±(1.0%+8)
	20kΩ	10Ω			±(1.0%+8)
	200kΩ	0.1kΩ			±(1.0%+8)
	2MΩ	1kΩ			±(1.0%+8)
	2kHz	1Hz			±(2.0%+5)
Temperature	0°C~400°C (32°F~752°F)	1°C		±(1.0%+3)	
	401°C~750°C (752°F~1382°F)	1°F		±(2.0%+3)	
Insulation Test	20MΩ	10kΩ		±(2.0%+2)	
	2000MΩ (Note<500MΩ)	1MΩ		±(4.0%+2)	
	2000MΩ (Note>500MΩ)	1MΩ		±(5.0%+2)	

Features

Display Counts		2000	
Jaw Opening		Φ50mm/2.0"	
Diode	Open Voltage		2.7V
Continuity Buzzer	<100Ω		•
Data Hold			•
LBD	Low Battery Display		•

General

Power Supply	1×9V 6F22 Battery		
Product Size	235mm×96mm×46mm/9.25"×3.8"×1.8"		
Product Weight	268g/0.59lb		
Model Number	M266	M266C	M266F
Certification	CE / ETL / RoHS	RoHS	CE / ETL / RoHS
Safety Rating	CAT II 1000V/ CAT III 600V	CAT II 1000V/ CAT III 600V	CAT II 1000V/ CAT III 600V



- Accessories included:**
- Test Leads
 - K Type Thermocouple (M266C)
 - Carry Bag
 - Battery and User's Manual





Accessories included:

- Test Leads
- K type Thermocouple
- Wrapping Case
- Battery and User's Manual

AC CLAMP METER 2000A

MAIN FEATURES:			■ MS2000G
- Display backlight	- Data Hold		
- Diode and Continuity detection	- Low battery display		
JAW SIZE: Ø 40 mm / 1.6"	VOLTAGE: DC 1000V AC 750 V	CURRENT: AC 2000A	

Specifications	Range	Resolution	Accuracy
DC Voltage	2V/20V/200V	1mV/10mV/0.1V	±(0.5%+1)
	1000V	1V	±(1.0%+2)
AC Voltage	200V/750V	0.1V/1V	±(1.0%+3)
	200A	0.1A	±(2.0%+5)
AC Current	2000A(<600A)	1A	±(2.0%+5)
	2000A(600A~1000A)	1A	±(3.0%+5)
	2000A(>1000A)	1A	±(3.0%+15)
Resistance	200Ω	0.1Ω	±(1.0%+3)
	20kΩ/2MΩ	10Ω/1kΩ	±(1.5%+15)
Frequency	2kHz	1Hz	±(2.0%+5)
	20kHz	10Hz	±(1.5%+5)
Temperature	0°C~400°C/32°F~752°F	1°C/1°F	±(1.0%+3)
	401°C~750°C/753°F~1382°F	1°C/1°F	±(2.0%+1)

Features		
Display Counts		2000
Jaw Opening	Φ55mm/2.2"	•
Diode	Open Voltage	3.0V
Continuity Buzzer	<30Ω	•
Data Hold		•
Display Backlight		•
LBD	Low Battery Display	•

General		
Power Supply	1×9V 6F22 Battery	
Product Size	282mm×104mm×47mm/11"×4.1"×1.85"	
Product Weight	570g/1.26lb	
Safety Rating	CAT II 1000V	
Certificate	RoHS	

AC CLAMP METER 600A

MAIN FEATURES:			■ MS2009A ■ MS2009C
- Display backlight, Work Light	- NCV detection		
- Diode and Continuity detection			
JAW SIZE: Ø 26 mm / 1.0"	VOLTAGE: DC 600V AC 600 V	CURRENT: AC 600A	

Specifications	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V	0.1mV/0.001V/0.01V/0.1V	±(0.6%+3)
	600mV/6V/60V	0.1mV/0.001V/0.01V	±(0.8%+2)
AC Voltage	600V	1V	±(0.8%+3) ±(1.0%+2)
	200mV	0.1mV	±(2.0%+3)
AC Voltage	2V/20V/200V	0.001V/0.01V/0.1V	±(0.8%+5)
	600mV/6V/60V	0.1mV/0.001V/0.01V	±(1.0%+10)
	600V	1V	±(1.0%+5) ±(1.2%+10)
AC Current	2A/20A/200A/600A	0.001A/0.01A/0.1A/1A	±(2.0%+5)
	6A/60A/600A	0.001A/0.01A/0.1A	±(2.5%+10)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ/1kΩ	±(0.8%+4)
	20MΩ	0.01MΩ	±(1.2%+5)
	600Ω/6kΩ/60kΩ/600kΩ/6MΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ/1kΩ	±(1.2%+2)
	60MΩ	0.01MΩ	±(2.0%+2)
Capacitance	10nF/100nF/1000nF/	0.001nF/0.01nF/0.1nF	±(3.0%+10)
	10μF/100μF/1000μF	1nF/10nF/100nF	±(3.0%+10)
Frequency (A)	10mF/60mF	10μF	±(4.0%+10)
	100Hz/1kHz	0.01Hz/0.1Hz	±(1.5%+5)
Frequency (V)	100Hz/1kHz/10kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)
Frequency (Hz/Duty)	10Hz/100Hz/1kHz/10kHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz	±(0.5%+5)
	100kHz/1MHz/10MHz	0.01kHz/0.1kHz/0.001MHz	±(0.5%+5)
Duty Cycle	0.5%~99%	0.1%	±(1.5%+15)
Temperature	-20°C~1000°C	1°C	±(2.0%+2)
	-4°F~1832°F	1°F	±(2.0%+4)

Features		
Display Counts		2000 6000
Jaw Opening		Φ26mm/1.0" Φ26mm/1.0"
Auto Ranging	Auto & Manual	• •
APO	Auto Power Off	• •
NCV	Non-Contact Voltage Detector	• •
Diode	Open Voltage	1.5V 1.5V
Continuity Buzzer		<60Ω <60Ω
MAX		• •
Data Hold		• •
Display Backlight		• •
Work Light		• •
LBD	Low Battery Display	• •

General		
Power Supply	3×1.5V AAA Batteries	
Product Size	218mm×78mm×35mm/8.9"×3.1"×1.4"	
Product Weight	239g/0.53lb	
Safety Rating	CAT III 600V	Certificate CE/ETL/RoHS



Accessories included:

- Test Leads
- Carry Bag
- Battery and User's Manual
- K type thermocouple(MS2009C)





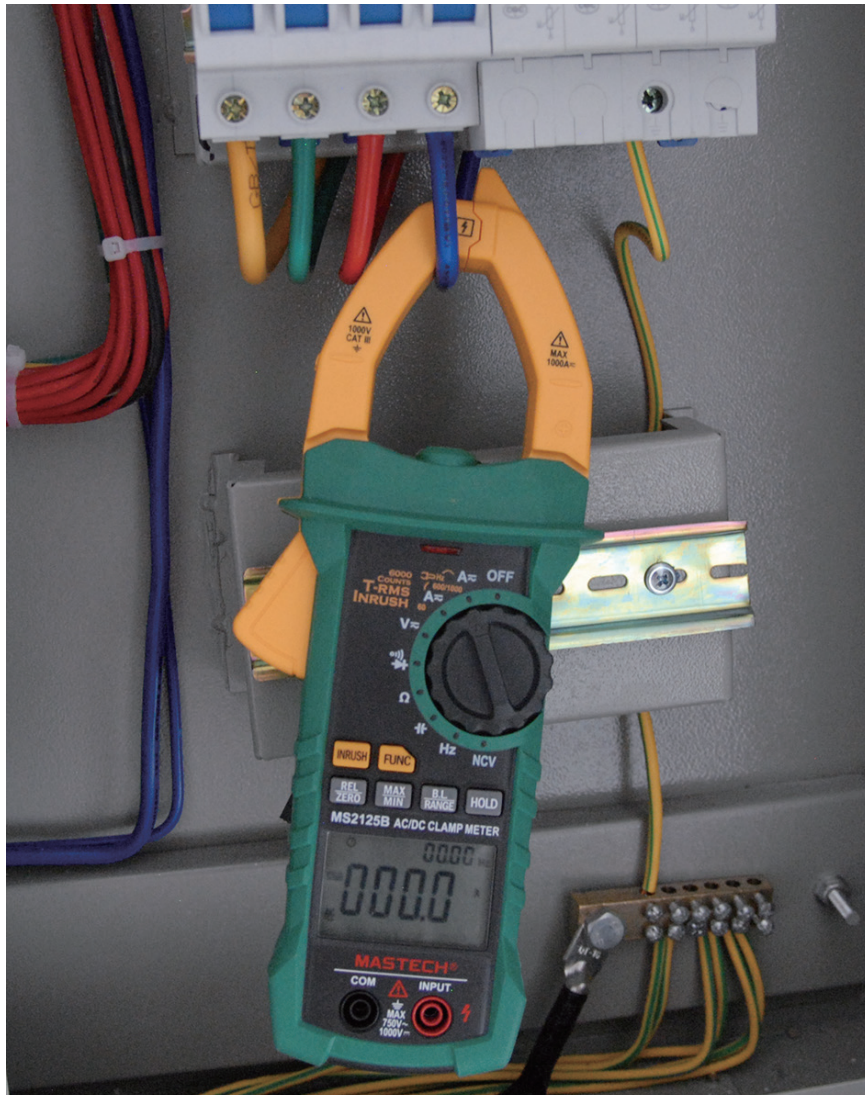
TRMS AC CLAMP METER 1000A

MAIN FEATURES:

- 6.000 counts
- TRMS
- Capacitance
- Display backlight, Work Light

JAW SIZE: Ø 40 mm / 1.6"	VOLTAGE: DC 1000V AC 750 V	CURRENT: AC 1000A
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- **MS2025A**
- **MS2025C**



Accessories included:

- Test Leads
- Carry Bag
- K type Thermocouple (MS2025C)
- Battery and User's Manual

Specifications	Range	Resolution	Accuracy	
			MS2025A	MS2025C
DC Voltage	60mV/600mV/6V/60V/600V	0.01mV/0.1mV/0.001V/0.01V/0.1V	±(0.5%+5)	
	660mV	0.1mV		±(0.8%+2)
	6.6V/66V/660V	0.001V/0.01V/0.1V		±(0.7%+2)
	1000V	1V	±(0.8%+4)	±(0.8%+2)
AC Voltage	60mV/600mV/6V/60V/600V	0.01mV/0.1mV/0.001V/0.01V/0.1V	±(0.6%+5)	
	660mV	0.1mV		±(1.5%+10)
	6.6V/66V/660V	0.001V/0.01V/0.1V		±(0.8%+3)
	750V	1V	±(0.8%+4)	±(1.0%+4)
AC Current	60A/600A/1000A	0.01A/0.1A/1A	±(2.0%+8)	
	66A/660A/1000A	0.01A/0.1A/1A		±(2.5%+6)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)	
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(1.2%+3)	
	660Ω/6.6kΩ/66kΩ/660kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ		±(0.8%+3)
	6.6MΩ/66MΩ	0.001MΩ/0.01MΩ		±(1.2%+3)
Capacitance	10nF/100nF/1000nF/10μF	0.001nF/0.01nF/0.1nF/0.001μF	±(3.0%+5)	
	100μF/1000μF/10mF/100mF	0.01μF/0.1μF/0.001mF/0.01mF	±(3.0%+5)	
	6.6nF/66nF/660nF/6.6μF	0.001nF/0.01nF/0.1nF/0.001μF		±(4.0%+5)
	66μF/660μF/6.6mF/66mF	0.01μF/0.1μF/0.001mF/0.01mF		±(4.0%+5)
Frequency (A)	100Hz/1000Hz	0.01Hz/0.1Hz	±(1.5%+5)	
	66Hz/660Hz	0.01Hz/0.1Hz		±(1.5%+5)
Frequency (V)	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)	
	66Hz/660Hz/6.6kHz	0.01Hz/0.1Hz/0.001kHz		±(1.5%+5)
Logic Frequency	10Hz/100Hz/1000Hz/10kHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz	±(0.3%+5)	
	100kHz/1000kHz/10MHz	0.01kHz/0.1kHz/0.001MHz	±(0.3%+5)	
	66Hz/660Hz/6.6kHz/66kHz	0.01Hz/0.1Hz/0.001kHz/0.01kHz		±(0.5%+2)
	660kHz/6.6MHz/66MHz	0.1kHz/0.001MHz/0.01MHz		±(0.5%+2)
Duty Cycle	0.1%~99.9%	0.1%	±(3.0%)	±(3.0%)
Temperature	-20°C~1000°C/-4°F~1832°F	1°C/1°F		±(3.0%+3)

Features			
Display Counts		6000	6600
Jaw Opening		Φ40mm/1.6"	Φ40mm/1.6"
Auto Ranging	Auto & Manual	•	•
APO	Auto Power Off	•	•
NCV	Non-Contact Voltage Detector	•	•
REL	Relative Measurement	•	•
Diode	Open Voltage	3.2V	3.2V
Continuity Buzzer	<50Ω	•	•
Data Hold		•	•
Display Backlight		•	•
MAX/MIN	Max/Min Measurement	•	•
Work Light		•	•
True RMS	True Root Mean Square	•	•
LBD	Low Battery Display	•	•
Dual Display			•
Bar Graph	Segments Bar Graph		•

General			
Power Supply	1×9V 6F22 Battery		
Product Size	238mm×92mm×50mm/9.37"×3.6"×1.9"		
Product Weight	390g/0.86lb		
Certification	CE/ETL/RoHS		
Safety Rating	CAT III 1000V/CAT IV 600V		



TRMS AC CLAMP METER 600A

MAIN FEATURES:		
- Display 2000 counts	- Auto Power Off	
- Auto & Manual Ranging	- Diode Open Voltage 1.5V	
JAW SIZE:	VOLTAGE:	CURRENT:
Ø 26 mm / 1.0"	DC 600V AC 600 V	AC 600A

MS2028A

Specifications	Range	Resolution	Accuracy
DC Voltage	2V/20V/200V	1mV/10mV/0.1V	±(0.8%+2)
	600V	1V	±(1.0%+2)
AC Voltage	2V/20V/200V	1mV/10mV/0.1V	±(1.0%+5)
	600V	1V	±(1.2%+5)
AC Current	2A(<0.5A)	1mA	±(3.5%+20)
	2A	1mA	±(3.0%+10)
	20A	10mA	±(3.0%+10)
	200A	0.1A	±(2.5%+10)
Resistance	600A	1A	±(1.5%+5)
	200Ω/2kΩ/20kΩ/200kΩ/2MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ	±(1.2%+2)
	20MΩ	10kΩ	±(2.0%+5)

Features		
Display Counts		2000
Jaw Opening		Φ 26mm/1.0"
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Diode	Open Voltage	1.5V
Continuity	Continuity Buzzer	<50Ω
True RMS	True root mean square	•
MAX	Maximum Measurement	•
Data Hold		•
Backlight	Display Backlight	•
LBD	Low Battery Display	•

General		
Power Supply	3×1.5V AAA Batteries	
Product Size	208mm×78mm×35mm/8.2"×3.1"×1.4"	
Product Weight	245g/0.54lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT III 600V	



- Accessories included:**
- Test Leads
 - Carry Bag
 - Battery and User's Manual



AC/DC CLAMP METER 1000A

MAIN FEATURES:		
- Temperature	- Diode and Continuity detection	
- Zero Function	- Data Hold	
JAW SIZE:	VOLTAGE:	CURRENT:
Ø 42 mm / 1.7"	DC 1000V AC 750 V	DC 1000A AC 1000A

MS2101

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV/4V/40V/400V	0.1mV/1mV/10mV/0.1V	±(0.7%+1)
	1000V	1V	±(0.8%+3)
AC Voltage	4V/40V/400V	1mV/10mV/0.1V	±(0.8%+5)
	750V	1V	±(1.0%+10)
DC Current	400A/1000A	0.1A/1A	±(3.0%+3)
AC Current	400A/1000A	0.1A/1A	±(3.0%+3)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ	±(1.2%+1)
	40MΩ	10kΩ	±(2.0%+3)
Capacitance	4nF/40nF/400nF	1pF/10pF/0.1nF	±(4.0%+10)
	4μF/40μF/100μF	1nF/10nF/100nF	±(4.0%+10)
Frequency	40Hz/400Hz/4kHz	0.01Hz/0.1Hz/1Hz	±(2.0%+1)
	40kHz/100kHz	10Hz/0.1kHz	±(2.0%+1)
Duty Cycle	0.1%~99.9%	0.10%	±(2.0%+2)
	-40°C~0°C	1°C	±(1.0%+6)
	1°C~400°C	1°C	±(1.0%+3)
Temperature	401°C~750°C	1°C	±(1.0%+5)

Features		
Display Counts		4000
Jaw Opening		Φ 42mm/1.7"
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Diode	Open Voltage	2.2V
Continuity	Continuity Buzzer	<50±20Ω
Data Hold		•
LBD	Low Battery Display	•

General		
Power Supply	1×9V 6F22 Battery	
Product Size	250mm×99mm×43mm/9.8"×3.9"×1.7"	
Product Weight	416g/0.92lb	
Certification	RoHS	
Safety Rating	CAT II 1000V/CAT III 600V	



- Accessories included:**
- Test Leads
 - K type Thermocouple
 - Carry Bag
 - Battery and User's Manual



AC/DC CLAMP METER 400A

- MAIN FEATURES:**
- Display backlight, Work Light
 - Diode and Continuity detection
 - Relative measurement
 - Data Hold, Max/Min hold

MS2128A

JAW SIZE: Ø 26 mm / 1.0"	VOLTAGE: DC 600V AC 600 V	CURRENT: DC 400A AC 400A
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Specifications	Range	Resolution	Accuracy
DC Voltage	400mV	0.1mV	±(1.0%+2)
	4V/40V/400V	0.001V/0.01V/0.1V	±(0.7%+2)
AC Voltage	600V	0.1V	±(0.8%+2)
	4V/40V/400V	0.001V/0.01V/0.1V	±(0.8%+3)
DC Current	40A/400A	0.01A/0.1A	±(2.0%+6)
	40A/400A	0.01A/0.1A	±(2.0%+6)
Resistance	400Ω/4kΩ/40kΩ	0.1Ω/0.001kΩ/0.01kΩ	±(0.8%+3)
	40kΩ/4MΩ	0.1kΩ/0.001MΩ	±(0.8%+3)
	40MΩ	0.01MΩ	±(1.2%+3)
Capacitance	40nF/400nF/4μF	0.01nF/0.1nF/0.001μF	±(4.0%+5)
	40μF/400μF/4000μF	0.01μF/0.1μF/1μF	±(4.0%+5)
Frequency (A)	100Hz/1kHz	0.1Hz/0.001kHz	±(1.5%+5)
	>1kHz	0.01kHz	Reference
Frequency (V)	100Hz/1kHz/10kHz	0.1Hz/0.001kHz/0.01kHz	±(1.5%+5)
	>10kHz	0.01kHz	Reference
Frequency (Hz/Duty)	10Hz/100Hz/1000Hz/10kHz/100kHz/1000kHz/10MHz	0.001Hz/0.01Hz/0.1Hz/1Hz/0.01kHz/0.1kHz/0.001MHz	±(0.5%+3)
			±(0.5%+3)
Duty Cycle	10%~95%	0.10%	±3.0%

Features		
Display Counts		4000
Jaw Opening		Φ26mm/1.0"
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
REL	Relative Measurement	•
Diode	Open Voltage	3V
Continuity Buzzer	<50±20Ω	•
MAX/MIN	MAX/MIN Measurement	•
Data Hold		•
Display Backlight		•
Work Light		•
LBD	Low Battery Display	•

General		
Power Supply	3×15V AAA Batteries	
Product Size	208mm×78mm×53mm/8.2"×3.1"×1.4"	
Product Weight	245g/0.54lb	
Certification	CE/ETL/RoHS	
Safety Rating	CAT III 600V	



Accessories included:

- Test Leads
- Carry Bag
- Battery and User's Manual



AC/DC CLAMP METER 600A

- MAIN FEATURES:**
- Display backlight, Work Light
 - Diode and Continuity detection
 - NCV detection
 - Diode and Continuity detection

MS2109A

JAW SIZE: Ø 26 mm / 1.0"	VOLTAGE: DC 600V AC 600 V	CURRENT: DC 600A AC 600A
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Specifications	Range	Resolution	Accuracy
DC Voltage	600mV/6V/60V/600V	0.1mV/0.001V/0.01V/1V	±(0.7%+2)
AC Voltage	6V/60V	0.001V/0.01V	±(0.8%+3)
	600V	1V	±(1.0%+4)
DC Current	60A/600A	0.01A/0.1A	±(3.0%+6)
AC Current	60A/600A	0.01A/0.1A	±(2.5%+6)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(1.2%+3)
Capacitance	40nF/400nF/4μF	0.01nF/0.1nF/0.001μF	±(4.0%+5)
	40μF/400μF/4000μF	0.01μF/0.1μF/1μF	±(4.0%+5)
Frequency (A)	100Hz/1kHz	0.01Hz/0.1Hz	±(1.5%+5)
Frequency (V)	100Hz/1kHz/10kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)
Frequency (Hz/Duty)	10Hz/100Hz/1kHz/10kHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz	±(0.5%+3)
	100kHz/1MHz/10MHz	0.01kHz/0.1kHz/0.001MHz	±(0.5%+3)
Duty Cycle	0.1%~99.9%	0.1%	±(3.0%+5)
	-20°C~0°C	1°C	±(3.0%+4)
	1°C~400°C	1°C	±(1.0%+3)
Temperature	401°C~1000°C	1°C	±(2.0%)

Features		
Display Counts		6000
Jaw Opening		Φ26mm/1.0"
Auto Ranging		Auto only
APO	Auto Power Off	•
NCV	Non-Contact Voltage Detector	•
REL	Relative Measurement	•
Diode	Open Voltage	2.7V
Continuity Buzzer		<50±20Ω
MAX / MIN		•
Data Hold		•
Display Backlight / Work Light		•
LBD	Low Battery Display	•

General		
Power Supply	3×1.5V AAA Batteries	
Product Size	218mm×78mm×35mm/8.9"×3.1"×1.4"	
Product Weight	239g/0.53lb	
Safety Rating	CAT III 600V	
Certification	CE/ETL/RoHS	



Accessories included:

- Test Leads
- K Type Thermocouple
- Carry Bag
- Battery and User's Manual





AC/DC CLAMP METER 80A

MAIN FEATURES:

- Display backlight, Work Light
- Diode and Continuity detection
- NCV detection
- Data Hold

JAW SIZE:	VOLTAGE:	CURRENT:
Ø 24 mm / 0.9"	DC 600V AC 600 V	DC 80A AC 80A

■ MS2160

Specifications	Range	Resolution	Accuracy
DC Voltage	4V/40V/400V/600V	1mV/10mV/0.1V/1V	±(0.8%+3)
AC Voltage	4V/40V/400V/600V	1mV/10mV/0.1V/1V	±(1.0%+3)
DC Current	4A/40A/80A	1mA/10mA/0.1A	±(2.5%+5)
AC Current	4A/40A/80A	1mA/10mA/0.1A	±(2.5%+5)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	0.1Ω/1Ω/10Ω/0.1kΩ/1kΩ	±(0.8%+3)
	40MΩ	10kΩ	±(1.2%+3)
Capacitance	4nF/40nF/400nF/4μF	1pF/10pF/0.1nF/1nF	±(4.0%+3)
	40μF/400μF/4mF/40mF	10nF/0.1μF/1μF/10μF	±(4.0%+3)
Frequency (Clamp)	100Hz/1kHz	0.01Hz/0.1Hz	±(1.5%+5)
Frequency (Voltage)	100Hz/1kHz/10kHz	0.01Hz/0.1Hz/1Hz	±(1.5%+5)
Logic Frequency	10Hz/100Hz/1kHz/10kHz	0.001Hz/0.01Hz/0.1Hz/1Hz	±(0.5%+3)
	100kHz/1MHz/10MHz	0.01kHz/0.1kHz/1kHz	±(0.5%+3)
Duty Cycle	0.5%~99.5%	0.1%	±(3.0%)
	-20°C~1000°C	1°C	±(3.0%+3)
Temperature	-4°F~1832°F	1°F	±(3.0%+3)

Features

Display Counts	4000
Jaw Opening	Φ24mm/0.9"
Auto Ranging	Auto & Manual
APO	Auto Power Off
NCV	Non-Contact Voltage Detector
Diode	Open Voltage
Continuity Buzzer	<50Ω
Data Hold	
Display Backlight	
Work Light	
LBD	Low Battery Display

General

Power Supply	3×1.5V AAA Batteries
Product Size	195mm×80mm×45mm/7.8"×3.1"×1.8"
Product Weight	195g/0.43lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- K type Thermocouple
- Carry Bag
- Battery and User's Manual



TRMS AC/DC CLAMP METER 600A

MAIN FEATURES:

- Display 6600 counts
- Auto & Manual Ranging
- Auto Power Off
- Inrush 100ms Current Integral

JAW SIZE:	VOLTAGE:	CURRENT:
Ø 26 mm / 1.0"	DC 600V AC 600 V	DC 400A AC 400A

■ MS2128

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV	0.1mV	±(1.0%+2)
	4V/40V/400V	0.001V/0.01V/0.1V	±(0.7%+2)
AC Voltage	600V	0.1V	±(0.8%+2)
	4V/40V/400V	0.001V/0.01V/0.1V	±(0.8%+3)
DC Current	40A/400A	0.01A/0.1A	±(2.0%+6)
	600V	0.1V	±(1.0%+4)
AC Current	40A/400A	0.01A/0.1A	±(2.0%+6)
	400Ω/4kΩ/40kΩ	0.1Ω/0.001kΩ/0.01kΩ	±(0.8%+3)
Resistance	400kΩ/4MΩ	0.1kΩ/0.001MΩ	±(0.8%+3)
	40MΩ	0.01MΩ	±(1.2%+3)
Capacitance	40nF/400nF/4μF	0.01nF/0.1nF/0.001μF	±(4.0%+5)
	40μF/400μF/4000μF	0.01μF/0.1μF/1μF	±(4.0%+5)
Frequency (A)	100Hz/1kHz	0.1Hz/0.001kHz	±(1.5%+5)
	>1kHz	0.01kHz	Reference
Frequency (V)	100Hz/1kHz/10kHz	0.1Hz/0.001kHz/0.01kHz	±(1.5%+5)
	>10kHz	0.01kHz	Reference
Frequency (Hz/Duty)	10Hz/100Hz/1000Hz/10kHz/	0.001Hz/0.01Hz/0.1Hz/1Hz	±(0.5%+3)
	100kHz/1000kHz/10MHz	0.01kHz/0.1kHz/0.001MHz	±(0.5%+3)
Duty Cycle	10%~95%	0.10%	±3.0%

Features

Display Counts	4000
Jaw Opening	Φ 26mm/1.0"
Auto Ranging	Auto & Manual
APO	Auto Power Off
REL	Relative Measurement
Diode	Open Voltage
Continuity Buzzer	<50±20Ω
MAX/MIN	MAX/MIN Measurement
Data Hold	
Display Backlight	
Work Light	
LBD	Low Battery Display

General

Power Supply	3×15V AAA Batteries
Product Size	208mm×78mm×53mm/8.2"×3.1"×1.4"
Product Weight	245g/0.54b
Certification	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- Carry Bag
- Battery and User's Manual





TRMS AC/DC CLAMP METER 1000A

MAIN FEATURES:

- Display backlight, Work Light
- Capacitance and frequency
- NCV detection
- Inrush current

MS2125A

JAW SIZE: Ø 40 mm / 1.6"	VOLTAGE: DC 1000V AC 750V	CURRENT: DC 1000A AC 1000A
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Specifications	Range	Resolution	Accuracy
DC Voltage	60mV/600mV/6V/60V/600V 1000V	0.01mV/0.1mV/0.001V/0.01V/0.1V 1V	±(0.5%+5) ±(0.8%+4)
AC Voltage	60mV/600mV/6V/60V/600V 750V	0.01mV/0.1mV/0.001V/0.01V/0.1V 1V	±(0.6%+5) ±(0.8%+4)
DC Current	60A/600A/1000A	0.01A/0.1A/1A	±(2.0%+8)
AC Current	60A/600A/1000A	0.01A/0.1A/1A	±(2.0%+8)
Inrush Current	60A/600A/1000A	0.01A/0.1A/1A	±(5.0%+60)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(2.0%+5)
Capacitance	10nF/100nF/1000nF/10μF	0.001nF/0.01nF/0.1nF/0.001μF	±(3.0%+5)
	100μF/1000μF/10mF/100mF	0.01μF/0.1μF/0.001mF/0.01mF	±(3.0%+5)
Frequency (A)	100Hz/1000Hz	0.01Hz/0.1Hz/	±(1.5%+5)
Frequency (V)	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)
Frequency (Hz/Duty)	10Hz/100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/0.001kHz/0.01kHz	±(0.3%+5)
	100kHz/1000kHz/10MHz	0.1kHz/0.001MHz/0.01MHz	±(0.3%+5)
Duty Cycle	0.1%~99.9%	0.1%	±(3.0%)

Features

Display Counts		6000
Jaw Opening		Φ40mm/1.6"
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
NCV	Non-Contact Voltage Detector	•
REL	Relative Measurement	•
Diode	Open Voltage	3.2V
Continuity Buzzer		<50Ω
MAX/MIN		•
Data Hold		•
Display Backlight		•
Work Light		•
True RMS	True Root Mean Square	•
LBD	Low Battery Display	•
Inrush	Inrush Current Measurement	•

General

Power Supply	1×9V 6F22 Battery
Product Size	238mm×92mm×50mm/9.37"×3.6"×1.9"
Product Weight	386g/0.85lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 1000V CAT IV 600V



Accessories included:

- Test Leads
- Carry Bag
- Battery and User's Manual

LEAKAGE CLAMP METER

MAIN FEATURES:

- Data Hold
- Low battery display
- Auto power off
- 1μA resolution

MS2006B

JAW SIZE: Ø 31 mm / 1.2"	CURRENT: AC 60A
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Specifications	Range	Resolution	Accuracy
AC Current	2mA	0.001mA	±(2.0%+10)
	20mA	0.01mA	±(2.0%+8)
	60A(<50A)	0.1A	±(2.0%+5)
	60A(>50A)	0.1A	±(3.0%+5)

Features

Display Counts		2000
Jaw Opening		Φ 31mm/1.2"
APO	Auto Power Off	•
Data Hold		•
LBD	Low Battery Display	•

General

Power Supply	2×1.5V AAA Batteries
Product Size	176mm×59mm×28mm/6.9"×2.3"×1.1"
Product Weight	150g/0.33lb
Certificate	RoHS
Safety Rating	CAT III 600V



Accessories included:

- Carry Bag
- Battery and User's Manual





LEAKAGE CLAMP METER WITH LOW-PASS FILTER

MAIN FEATURES:

- 1µA resolution
- Capacitance and temperature
- TRMS
- Display 4000 counts

■ MS2016A

JAW SIZE: Ø 30 mm / 1.2"	VOLTAGE: DC 600V AC 600V	CURRENT: AC 4mA~150A
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Specifications	Range	Resolution	Accuracy
DC Voltage	4V/40V/400V/600V	1mV/10mV/100mV/1V	±(0.5%+4)
AC Voltage	4V/40V/400V/600V	1mV/10mV/100mV/1V	±(1.0%+3)
AC Current	4mA/40mA (50/60Hz)	1µA/10µA	±(2.0%+10)
	400mA/4A/40A (50/60Hz)	0.1mA/1mA/10mA	±(2.0%+5)
	150A (50/60Hz)	0.1A	±(2.0%+10)
	4mA/40mA (40~1kHz)	1µA/10µA	±(3.0%+5)
Resistance	400Ω/4KΩ/40KΩ/400KΩ/4MΩ	0.1Ω/1Ω/10Ω/100Ω/1kΩ	±(0.8%+3)
	40MΩ	10kΩ	±(1.0%+3)
	Capacitance	40nF/400nF/4µF	0.01nF/0.1nF/1nF
Temperature	40µF/400µF/4mF/40mF	10nF/100nF/1µF/10µF	±(3.0%+8)
	-20°C ~ 0°C/-4°F ~ 32°F	0.1°C/0.1°F	±(3.0%+5)
	0°C ~ 400°C/32°F ~ 752°F	0.1°C/0.1°F	±(1.5%+5)
	400°C ~ 1000°C/752°F ~ 1832°F	1°C/1°F	±(3.0%+5)

Features

Display Counts		4000
Jaw Opening		Ø30mm/1.2"
Auto Ranging	Auto	•
APO	Auto Power Off	•
True RMS	For AC Voltage	•
LPF	Low Pass Filter Function (50/60Hz)	•
Zero	Zero adjustment	•
MAX/MIN		•
Diode	Open Voltage	3.2V
Continuity	Continuity Buzzer	<40Ω
Data Hold		•
LBD	Low Battery Display	•

General

Power Supply	2×1.5V AAA Batteries
Product Size	213mm×62mm×38mm/8.39"× 2.44"×1.5"
Product Weight	238g/0.52lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT III 600V



Accessories included:

- Test Leads
- K Type Thermocouple
- Baattery and User's Manual

THREE PHASE POWER CLAMP METER

MAIN FEATURES:

- Active, reactive and apparent power
- Power factor
- Active energy
- Harmonic measurement

■ MS2203

■ MS2205

JAW SIZE: Ø 50 mm / 2"	VOLTAGE: DC 600V AC 600V	CURRENT: AC 20A~1000A
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Specifications	Range	Resolution	Accuracy
AC Voltage	100V/300V/600V	0.1V	±(1.2%+5)
	80V/180V/400V/600V	0.1V/0.1V/1V/1V	±(1.0%+5)
AC Current	40A/100A/400A/1000A	0.1A/0.1A/0.1A/1A	±(2.0%+5)
	20A/40A/100A/200A/450A/1000A	0.01A/0.01A/0.1A/0.1A/1A/1A	±(2.0%+5)
Active Power	4kW/10kW/40kW/100kW	0.01kW	±(3.0%+5)
	600kW	0.1kW	±(3.0%+5)
	30kW/60kW/120kW	0.01kW/0.01kW/0.1kW	±(3.0%+5)
	150kW/300kW/600kW	0.1kW	±(3.0%+5)
Apparent Power	4kVA/10kVA/40kVA/100kVA/600kVA	0.01kVA	±(3.0%+5)
	3kVA/12kVA/30kVA	0.001kVA/0.01kVA/0.01kVA	±(3.0%+5)
	120kVA/150kVA/600kVA	0.1kVA	±(3.0%+5)
Reactive Power	4kVAr/10kVAr/40kVAr/100kVAr	0.01kVAr	±(4.0%+5)
	600kVAr	0.1kVAr	±(4.0%+5)
	3kVAr/12kVAr/30kVAr	0.001kVAr/0.01kVAr/0.01kVAr	±(3.0%+5)
	120kVAr/150kVAr/600kVAr	0.1kVAr	±(3.0%+5)
Power Factor	0.3~1	0.001	±(2.0%+2)
Active Energy	1kWh~9999kWh	0.001kWh	±(3.0%+2)
Frequency	20Hz~1000Hz	0.1Hz	±(0.5%)
	30Hz~1000Hz	0.1Hz	±(0.5%+1)
Harmonic Measurement (fundamental)	Harmonic Number :1		±(3.0%+10)
	Harmonic Number :2-6		±(3.5%+10)
	Harmonic Number :7-8		±(4.5%+10)
	Harmonic Number :9-10		±(5.0%+10)
	Harmonic Number :11-15		±(7.0%+10)
	Harmonic Number :16-20		±(10%+10)

Features

Display Counts		9999	6000
Jaw Opening	Φ 50mm/2.0"	•	•
Auto Ranging	Auto & Manual	•	•
APO	Auto Power Off	•	•
Data Logging	groups	28	100
True RMS	True root mean square	•	•
Bar Graph		•	•
MAX/MIN	MAX/MIN Measurement	•	•
Data Hold		•	•
Display Backlight		•	•
LBD	Low Battery Display	•	•
RS232 Interface	Windows OS	•	•

General

Power Supply	4×1.5V AA Batteries	Product Size	300mm×103mm×51mm/11.8"×4.1"×2.0"
Product Weight	640g/1.4lb	Certificate	RoHS



Accessories included:





POWER CLAMP METER SMARTPHONE CONNECTION

MAIN FEATURES:

- TRMS
- NCV detection
- Harmonic measurement
- Power factor

■ MS2225A

JAW SIZE: Ø 40 mm / 1.6"	VOLTAGE: DC 1000V AC 1000V	CURRENT: AC 1000A
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Accessories included:

- Test Leads
- Test Clips
- Carrying Bag
- Battery and User's Manual



*For further information about SMARTPHONE Connection please check page 4.

Specifications	Range	Resolution	Accuracy
DC Voltage	6V/60V/600V	0.001V/0.01V/0.1V	±(0.5%+5)
	1000V	1V	±(0.8%+4)
AC Voltage	6V/60V/600V	0.001V/0.01V/0.1V	±(0.6%+5)
	750V	1V	±(0.8%+4)
AC Current	60A/600A/1000A	0.01A/0.1A/1A	±(2.0%+8)
Inrush Current	60A/600A/1000A	0.01A/0.1A/1A	±(5.0%+60)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(2.0%+5)
Capacitance	9.999nF/99.99nF/999.9nF/9.999μF	0.001nF/0.01nF/0.1nF/0.001μF	±(3.0%+5)
	99.99μF/999.9μF/9.999mF/99.99mF	0.01μF/0.1μF/0.001mF/0.01mF	±(3.0%+5)
Active Power	3.0W/100.0W/4000W/ 10.0kW/100.0kW/750kW	0.01W/0.1W/1W/ 0.01kW/0.1kW/1kW	±(3.0%+5)
Apparent Power	3.0VA/100.0VA/4000VA/ 10.0kVA/100.0kVA/750kVA	0.01VA/0.1VA/1VA/ 0.01kVA/0.1kVA/1kVA	±(3.0%+5)
Reactive Power	3.0VAr/100.0VAr/4000VAr/ 10.0kVAr/100.0kVAr/750kVAr	0.01VAr/0.1VAr/1VAr/ 0.01kVAr/0.1kVAr/1kVAr	±(3.0%+5)
Power Factor	0.3~1	0.001	±(3.0%+5)
Frequency (V)	99.99Hz/999.9Hz/9.999kHz/ > 10kHz	0.01Hz/0.1Hz/0.001kHz/ 0.01kHz	±(1.5%+5)
Frequency (A)	99.99Hz/999.9Hz/ > 1kHz	0.01Hz/0.1Hz/ 0.001kHz	±(1.5%+5)
Frequency (W)	40~1kHz	0.1Hz	±(0.5%+1)
Frequency (KW)	40~1kHz	0.1Hz	±(0.5%+1)
Frequency (Hz/Duty)	10Hz/100Hz/1000Hz/10kHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz	±(0.3%+5)
	100kHz/1000kHz/10MHz	0.01kHz/0.1kHz/0.001MHz	±(0.3%+5)
Duty Cycle	0.1%-99.9%	0.1%	±(3.0%+3)
Harmonic Measurement	Harmonic Number:1		±(3.0%+10)
	Harmonic Number:2~6		±(3.5%+10)
	Harmonic Number:7~8		±(4.5%+10)
	Harmonic Number:9~10		±(5.0%+10)
	Harmonic Number:11~15		±(7.0%+10)
Harmonic Number:16~20		±(10%+10)	
Features			
Display Counts			6000
Jaw Opening			Φ40mm/1.6"
Auto Ranging	Auto & Manual		•
APO	Auto Power Off		•
True RMS	True root mean square		•
Diode	Open voltage		3.2V
Continuity	Continuity Buzzer		<50Ω
Inrush	Inrush Current measurement		•
MAX/MIN			•
Data Hold			•
REL	Relative measurement		•
Display Backlight			•
Worklight			•
LBD	Low Battery Display		•
NCV	Non-Contact Voltage Detector		•
Wireless	APP Connection		•
General			
Power Supply	9V 6F22 Battery		
Product Size	250mm×98mm×53mm/9.84"×3.78"×2.09"		
Product Weight	450g/0.99lb		
Certificate	CE/ETL/RoHS		
Safety Rating	CAT III 1000V		



OPEN-JAW DIGITAL CLAMP METER

MAIN FEATURES:			■ MS2601
- Display backlight, Work Light		- NCV detection	
- Diode and Continuity detection		- Data Hold	
JAW SIZE:	VOLTAGE:	CURRENT:	
Ø 12 mm / 0.5"	DC 600V AC 600V	AC 200A	

Specifications	Range	Resolution	Accuracy
DC Voltage	600mV/6V/60V/600V	0.1mV/0.001V/0.01V/0.1V	±(0.7%+3)
AC Voltage	6V/60V/600V	0.001V/0.01V/0.1V	±(0.8%+3)
LO-Z(DCV/ACV)	1V~600V	0.001V	±(2.0%+3)
DC Current	600uA/1000uA	0.1uA/1uA	±(1.0%+4)
AC Current	200A	0.1A	±(3.0%+3)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+3)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(1.2%+3)
Capacitance	60nF/600nF/6μF/60μF	0.01nF/0.1nF/0.001μF	±(4.0%+5)
	600μF/6000μF/60mF	0.01μF/0.1μF/1μF/0.01mF	±(4.0%+5)
Frequency (Hz/Duty)	60Hz/600Hz/6kHz/60kHz	0.01Hz/0.1Hz/0.001kHz/0.01kHz	±(0.3%+5)
	600kHz/6MHz/60MHz	0.1kHz/0.001MHz/0.01MHz	±(0.3%+5)
Frequency (A)	100Hz/1000Hz	0.01Hz/0.1Hz	±(1.5%+5)
Frequency (V)	100Hz/1000Hz/10kHz	0.01Hz/0.1Hz/0.001kHz	±(1.5%+5)
Duty Cycle	5%~95%	0.1%	±(0.3%)
Temperature	-20°C~0°C/-4°F~32°F	1°C/1°F	±(3.0%+2)
	0°C~400°C/32°F~752°F	1°C/1°F	±(2.0%+2)
Features			
Display Counts		6000	
Jaw Opening		Φ 12mm/0.5"	
Auto Ranging	Auto & Manual		●
APO	Auto Power Off		●
NCV	Non-Contact Voltage Detector		●
Diode	Open Voltage	3.2V	
Continuity Buzzer		<50Ω	
Data Hold			●
Display Backlight			●
Work Light			●
LBD	Low Battery Display		●
General			
Power Supply	1×9V 6F22 Battery		
Product Weight	265g/0.58lb		
Product Size	201mm×65mm×43mm/ 7.7"×2.6"×1.7"		
Certificate	CE / ETL /RoHS		
Safety Rating	CAT III 600V		



- Accessories included:**
- Test Leads
 - K Type Thermocouple
 - Baattery and User's Manual
 - Carry Bag

CURRENT TRANSDUCER FOR DIGITAL MULTIMETERS

MAIN FEATURES:		■ MS3300 ■ MS3302
- Compatible with any digital multimeter with minimum resolution of 1mV in voltage measurement		
JAW SIZE:	CURRENT:	
Ø 55 mm / 2.2" Ø 28 mm / 1.1"	1000A AC/DC 400A AC	

Specifications	Range	Accuracy
DC Current	1000A	±(3.0%+5)
AC Current	1000A	±(3.0%+5)
Output	DC 1mV / A AC 1mV / A	
Features		
Jaw Opening	Φ55mm/2.2"	
True RMS	True Root Mean Square	
DCA ZERO	Zero adjust	
Frequency	DC/AC 50~60Hz	
General		
Power Supply	1×9V 6F22 Battery	
Product Size	256mm×104mm×47mm/9.3"×3.86"×1.9"	
Product Weight	520g/1.1lb	
Certificate	RoHS	
Safety Rating	CAT II 600V	

Specifications	Range	Accuracy
AC Current	0.1A~400A	±(2.0%+5)
Output	10mV/A 1mV/A	±(2.0%+5) ±(2.0%+5)
Features		
Jaw Opening	Φ28mm/1.1"	
General		
Power Supply	N/A	
Product Size	143mm×64mm×30mm/5.6"×2.5"×1.2"	
Product Weight	185g/0.4lb	
Certificate	RoHS	
Safety Rating	CAT II 600V	



- Accessories included:**
- Wrapping Case
 - Battery and User's Manual





AC LINE SPLITTER

MAIN FEATURES:
-voltage measurement terminals
-X1 and X10 current measurement terminals

- MS922A
- MS922D
- MS922E

	MS922A	MS922D	MS922E
Specifications			
AC Voltage	125V	250V	250V
AC Current		15A	
X1 current terminal		•	
X10 current terminal		•	
Features			
Allows for Easy AC Current Measurements		•	
Provides the Ability to Safely Measure Current		•	
Separates the Hot/Live Conductor from the Neutral and Ground		•	
Voltage check sockets for easy power calculations		•	
General			
Product Size	171mm×57mm×48mm/ 6.7"×2.2"×1.9"	•	
	200 mm×57mm×48mm/ 7.8"×2.2"×2.9"		•
	173mm×57mm×48mm/ 6.8"×2.2"×1.9"		•
Product Weight	131g/0.29lb	140g/0.3lb	131g/0.29lb
Certificate	ETL/RoHS	RoHS	RoHS
Safety Rating	CAT II 600V	CAT II 600V	CAT II 600V



Accessories included:

- User's Manual



MS922A



MS922D



MS922E

Voltage Testers

Non contact voltage testers | Two pole voltage testers





3 LEVELS ADJUSTABLE NCVT WITH LASER

MAIN FEATURES:

- 3 sensitivity levels
- Work light
- IP67
- Laser Pointer

■ MS8916A

Specifications	
Non-Contact AC Voltage Detector	•
AC Voltage Range	24~1000V
Frequency	50Hz~60Hz
Sound Indication	•
Light Indication	3 LED's bar
Laser Pointer	•
Double Molded Case	•
AC Voltage Sensitivity Adjustment	• (3 levels)
Low Battery Indication	•
Auto Power Off	•
Protection degree	IP67
Operating Temperature	-10°C~50°C
General	
Storage Temperature	-20°C~60°C
Humidity	<85%RH
Altitude	<2000m
Product Size	153.0mmx26.6mmx28.5mm/6.02"x1.05"x1.12"
Product Weight	42g/0.09lb
Certificate	CE/ETL/RoHS
Safety Rating	CAT IV 1000V
Power Supply	2×1.5V AAA



Accessories included:

- Battery and User's Manual



NON CONTACT AC VOLTAGE TESTER

MAIN FEATURES:

- Sound and light indication
- Fixed sensitivity

■ MS8900A

■ MS8900C

	MS8900A	M8900C
Specifications		
Non-Contact AC Voltage Detector	•	•
AC Voltage Range	90~1000V	100~240V
Frequency	50Hz~60Hz	
Sound and Light Indication	•	
Red and Green LED Light	•	
Double Molded Case	•	
Operating Temperature	0°C~50°C	
General		
Storage Temperature	-20°C~60°C	
Humidity	<85%RH	
Altitude	<2000m	
Product Size	157mm×24mm×20mm/6.18"×0.94"×0.78"	
Product Weight	42g/0.09lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT II 1000V/CAT III 600V	
Power Supply	2×1.5V AAA	2×1.5V AAA



Accessories included:

- Battery and User's Manual





ADJUSTABLE NON CONTACT AC VOLTAGE TESTER

MAIN FEATURES:
- Sound and light indication
- Adjustable sensitivity

- **MS8902A**
- **MS8902B**

	MS8902A	MS8902B
Specifications		
Non-Contact AC Voltage Detector	●	
AC Voltage Range	12~1000V	20~1000V
Frequency	50Hz~500Hz	
Sound and light Indication	●	
Red and Green LED Light	●	
Double Molded Case	●	
Metal Detecting Distance	<20mm	
AC Voltage Sensitivity adjustment	●	
Memory Sensitivity function	●	
Auto Power Off	●	
Low Battery Indication	●	
Operating Temperature	-10°C~50°C	
General		
Storage Temperature	-20°C~60°C	
Humidity	<85%RH	
Altitude	<2000m	
Product Size	157mm×24mm×20 mm/6.18"×0.94"×0.78"	
Product Weight	42g/0.09lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT II 1000V/CAT III 600V	
Power Supply	2×1.5V AAA	2×12V A23S



Accessories included:

- Battery and User's Manual



NCVT WITH WORK LIGHT

MAIN FEATURES:
- 50-1000V - Sound and light indication
- Work light

- **MS8907**

	MS8907	
Specifications		
NCV	Non-Contact AC Voltage Detector	
AC Voltage	50~1000V	
Frequency	50Hz/60Hz	
Indication	Sound and Light	
LED	Red and Green LED Light	
Altitude	<2000m	
Operation TEMP	-10°C~50°C	
Storage TEMP	-20°C~60°C	
Humidity	<85%RH	
Work Light	●	
General		
Power Supply	2×1.5V AAA Batteries	
Product Size	157mm×24mm×20mm/6.2"×0.95"×0.79"	
Product Weight	42g/0.09 lb	
Certificate	CE/ETL/RoHS	
Safety Rating	CAT II 1000V/CAT III 600V	



Accessories included:

- Battery and User's Manual





NCVT WITH IR THERMOMETER

MAIN FEATURES:
 - 12V - 1000V - IR thermometer
 - Adjustable sensitivity - Work light

MS6580B

Specifications	Range	Accuracy
Temperature	-20°C~0°C	±3°C
	-4°F~32°F	±5.5°F
	0°C~330°C	±(1.5%+2°C)
	32°F~626°F	±(1.5%+3°F)
Resolution		0.1°C/0.1°F
Repeatability		±0.1°C
Emissivity		0.95
Optical Resolution		4 : 1
AC Voltage Detector	12-1000V / 50-60Hz	•
Features		
NCV	Non-Contact Voltage Detector	•
NCV Sensitivity	4Levels	•
IRT	Infrared Temperature	•
Spectral Response	8-14 μm	•
MAX Altitude	2000m	•
Laser	<1mW/630-670nm	•
Laser Pointer		•
°C/°F Selection		•
Response Time	0.5 second	•
Relative Humidity	10%~90%	•
Reading Hold		•
Work Light		•
Display Backlight		•
LBD	Low Battery Display	•
General		
Power Supply	2×1.5V AAA Battery	
Product Size	152mm×31mm×31mm/6"×1.22"×1.22"	
Product Weight	220g/0.44lb	
The Default Temperature	(°C)Centigrade/(°F)Fahrenheit	
Certification	CE/ETL/RoHS	
Safety Rating	CAT II 1000V/CAT III 600V	



Accessories included:

- Battery and User's Manual



TWO POLE VOLTAGE TESTERS

MAIN FEATURES:
 - 12V - 400V AC/DC - RCD test
 - LED indicator

MS8922A

MS8922B

Specifications		MS8922A	MS8922B
AC/DC Voltage LED Steps	±12V, 24V, 50V, 120V, 230V, 400V	•	•
Accuracy	-30%~0% of indication	•	•
Frequency	50Hz/60Hz	•	•
RCD	RCD Test function		•
Features			
Altitude	<2000m	•	•
Operation Time	Maximum 30s	•	•
Recovery Time	10 minutes	•	•
Relative Humidity	<80%RH	•	•
Temperature Range	-10~55°C/14~131°F	•	•
General			
Power Supply	N/A		
Product Size	223mmx40mmx32 mm/8.78"x1.57"x1.26"		
Product Weight	98.5g/0.26lb		
Certificate	CE/ETL/RoHS		
Safety Rating	CAT III 400V		



Accessories included:

- Battery and User's Manual

Circuit Testers

Wire testers and trackers | Socket testers | Circuit breaker finders



NETWORK CABLE TESTERS

MAIN FEATURES:

- RJ45 and coaxial cables (BNC) - Up to 200m
- Cable shield testing

- **MS6810**
- **MS6811**

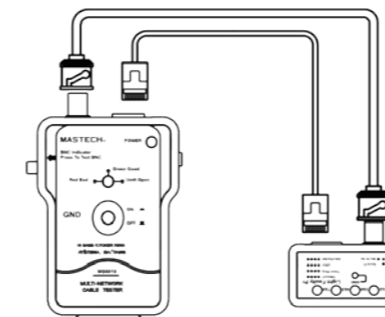
	MS6810	MS6811
Specifications		
Twisted-wire-pair cables (RJ45): 10Base-T, T568A, T568B, Token Ring	•	•
Testing Cables Shield Integrity	•	•
Coaxial Cable (BNC)	•	
Low Battery Indicator		•
Measurement Distance of Cables	200m(max)	200m(max)
General		
Power Supply	1×9V 6F22 Battery	1×6V 4LR44/4AG13 Battery
Product Size	153mm×74mm×31mm / 6.0"×2.9"×1.2"	125mm×55mm×30mm / 4.9"×2.2"×1.2"
Product Weight	120g/0.26lb	106g/0.23lb
Certificate	CE/ETL/RoHS	CE/ETL/RoHS



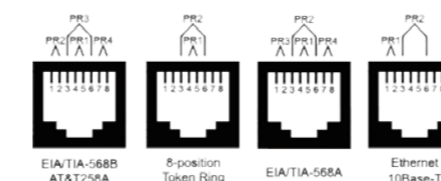
MS6811



Annex A



Annex B



Fault details

Fig.1 SHORT

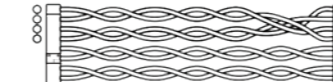


Fig.2 MISWIRE



Fig.3 REVERSED



Fig.4 SPLIT PAIRS



Accessories included:

- Battery and User's Manual



CABLE TRACKER

MAIN FEATURES:

- RJ11 and power cable tracking
- State of the telephone line
- Continuity function

■ MS6812A

MS6812A

Applications

- Judge Continuity of the Cables or Wires
- Track the Cables or Wires, and Diagnose the Break Point
- Receive the Tone Signal on the Cables or Wires(Telephone Line)
- Identify the State in the Working Telephone Line(Clear, Ringing, Busy)
- Send a Single Solid or a Dual Alternating Tone to the Target Cables or Wires

Features

Top Generator Output	Single (1500Hz)
(Square Waveform):	Dual (1300~1500Hz)
Send Tone Frequency	1.5kHz
Receive Frequency	100Hz~300kHz
Instruction	Sound and Light
LED	Cont and Tone LED Light

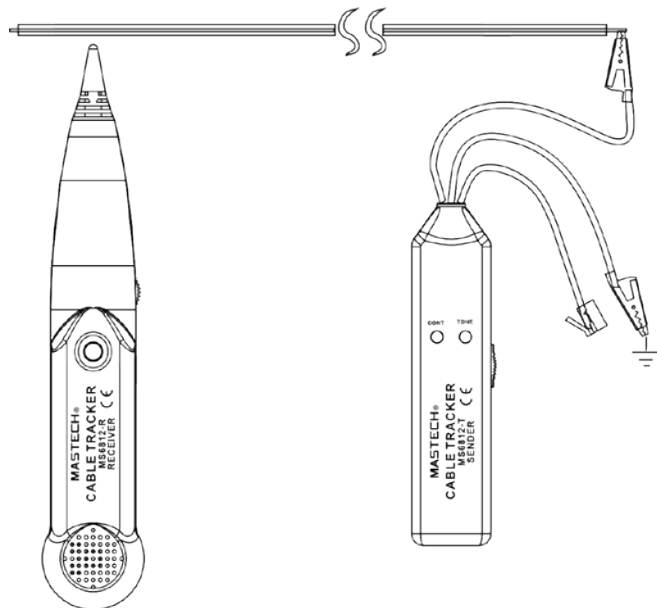
General

Power Supply	2x9V 6F22 Batteries
Receiver Size	238mm×43mm×26mm/9.4"×1.7"×1.0"
Emitter Size	145mm×35mm×25mm/5.7"×1.38"×0.98"
Receiver Weight	71g/0.16lb
Emitter Weight	87g/0.2lb
Certificate	RoHS



Accessories included:

- Battery and User's Manual



MULTIFUNCTION CABLE TRACKER

MAIN FEATURES:

- RJ11, RJ45 and coaxial cables
- State of the telephone line
- Cable tester and tracker

■ MS6813

MS6813

Applications

- Testing Coaxial Cable (BNC)
- Twisted-wire-pair cables (RJ45): 10Base-T, T568A, T568B, Token Ring
- Testing Cable's Shield Integrity
- Judge Continuity of the Cables or Wires
- Track the cables or wires, and diagnose the break Point
- Receive the tone signal on the cables or wires(telephone line)
- Identify the state in the working telephone line(clear, ringing, busy)
- Send a Single Solid or a Dual Alternating Tone to the Target Cables or Wires

Features

Send tone frequency: 1-5kHz
Receive frequency: 100Hz~300kHz

General

Power Supply	2×9V 6F22
Product Size	206mm×84mm×55mm/8.1"×3.3"×2.1"
Product Weight	330g/0.72lb
Certificate	CE/ETL/RoHS



Accessories included:

- Carry Bag
- Battery and User's Manual





ADVANCED CABLE LOCATOR

MS6818

MAIN FEATURES:

- One or dual-pole application
- Adjustable sensitivity in transmitter and receiver
- Circuit breaker finder function

Applications and Feature :

- Find the Breaks or Shorts in Cable in the wall or Earth
- Track Cables in the wall or Earth
- Find the Fuse and Safeguard
- Find the Breaks or Shorts in Conduit under the Floor
- Track a Metal Conduit in the Project of ware or hot
- Sensitivity of transmitter or receiver can be selected
- Auto Ranging, Auto Power Off, Backlight and Worklight

Technical Parameters of Transmitter

Output Signal	125kHz
External Voltage	DC12~400V AC12~400V(50~60Hz) ±2.5%
Fuse	F0.5A 1000V
MIN Current	about 31mA
MAX Current	about 115mA
In Work	0~40°C, with MAX relative humidity of 80%
In Storage	-20~60°C, with MAX relative humidity of 80%
Altitude	<2000m
Product Size	190mm×89mm×42.5mm/7.48"×3.5"×1.67"
Product Weight	420g/0.92lb
Power Supply	1×9V 6F22 Battery

Technical Parameters of Receiver

Depth of Tracking	The Depth of Tracking Depends on the Material and Specific Applications
Cable	Single pole application: about 0~2m
Locating	Dual pole application: about 0~0.5m
Mode	Single loop line: Up to 2.5m
MIN Current	about 32mA
MAX Current	about 89mA
In Work	0~40°C, with MAX relative humidity of 80%
In Storage	-20~60°C, with MAX relative humidity of 80%
Altitude	<2000m
Product Size	241.5mm×78mm×38.5mm/9.5"×3"×1.5"
Product Weight	350g/0.77lb
Power Supply	6×1.5V AAA Battery

General

Certificate	CE/ETL/RoHS
Safety Rating	CAT III 300V



Accessories included:

- Test Leads
- Test Probe
- Alligator Clip
- Grounding Rod
- Package Bag
- Battery and User's Manual

● One-pole application

- Locating of line interruptions using two transmitters
- Locating and Tracing of lines and Sockets
- Locating of lines interruptions
- Detect the laid metal tap water pipe and metal heating pipe
- Detect the narrow (blocked) part of the laid non-metallic pipeline
- Detect the power supply circuit on the same floor
- Track an underground circuit
- Detect the laid metal tap water pipe and metal heating pipe
- Error detection for an electrical floor heating

● Dual-pole application

- Search for the fuses
- Detect circuits laid relatively deep
- Search for short circuit in the circuit
- Applications in closed circuits



MS6860D

VOLTAGE:
AC 230 V



MS6860E

VOLTAGE:
AC 230 V

SOCKET TESTER

- MS6860D
- MS6860E

	MS6860D	MS6860E
Specifications		
Voltage Range	230V	
LED indication of the socket's wiring	Correct	
	Missing Earth	
	Live-Earth Reverse	
	Live-Neutral Reverse	
	Missing Neutral	
General		
Product Size	68mm×60mm×56mm/2.67"×2.36"×2.2"	
Product Weight	60g/0.13lb	
Certification	CE/ETL/RoHS	
Safety Rating	CAT II 230V	



SOCKET TESTER

- MS112
- MS102

	MS102	MS112
Specifications		
AC Voltage	125V	125V
Operating Temperature	0~40°C	0~40°C
Operating Humidity	<80% RH	<80% RH
GFCI	•	
Indicator		
Indicator	Fault	Reason for Wiring Fault
○ ○ ○	Open Ground	Ground contact not connected
○ ○ ●	Open Neutral	Neutral contact not connected
○ ○ ○	Open Hot	Hot contact not connected
● ○ ○	Hot/Ground Reverse	Hot and ground contacts reversed
● ● ○	Hot/Neutral Reverse	Hot and neutral contacts reversed
○ ○ ●	Correct	Receptacle is wired correctly
General		
Product Size	82mm×42mm×32mm/3.2"×1.65"×1.26"	
Product Weight	45g/0.1lb	
Certification	ETL/RoHS	
Safety Rating	CAT II 125V	



MS112

3 WIRE:
AC 125 V



MS102

3 WIRE / GFCI:
AC 125 V



MS5902RTD

VOLTAGE:
AC 230 V



MS5902RTE

VOLTAGE:
AC 230 V



MS5902RTF

VOLTAGE:
AC 120 V



CIRCUIT BREAKER FINDER

- MS5902RTD
- MS5902RTE
- MS5902RTF

General

Power Supply	1x9V 6F22 Battery	
Product Size	Receiver	198x40x50mm 7.8"x1.57"x1.97"
	Transmitter (MS5902RTD)	71x64x55mm
	Transmitter (MS5902RTE)	2.8"x2.5"x2.16"
	Transmitter (MS5902RTF)	82x42x32mm 3.2"x1.65"x1.26"
Product Weight	Receiver	126g/0.28lb
	Transmitter (MS5902RTD)	60g/0.13lb
	Transmitter (MS5902RTE)	60g/0.13lb
	Transmitter (MS5902RTF)	35g/0.1lb
Certification	Receiver + Transmitter CE/ETL/RoHS	
Safety Rating	CAT II 600V	

Transmitter Model	D	E	F
AC Voltage Range	230V	230V	120V
GFCI			•
Socket Test	•	•	•
Receiver + Transmitter	Quickly and easily identify the breaker connected to a specific socket		
Transmitter (Socket Tester Mode) LED indication of the socket's wiring	Correct		
	Missing earth		
	Live-earth reverse		
	Live-neutral reverse		
	Missing neutral		
Receiver	Work Light at the Head of MS5902R Points to the Target Area.		
	Low Battery Indication		
	Buzzer and LED instructions		



CIRCUIT BREAKER FINDER WITH NCV

- MS5905RTD
- MS5905RTE
- MS5905RTB

General

Power Supply	1x9V 6F22 Battery	
Product Size	Receiver	177x46x31mm 6.97"x1.81"x1.22"
	Transmitter (MS5905RTB)	82x42x32mm 3.2"x1.65"x1.26"
	Transmitter (MS5905RTD)	71x64x55mm
	Transmitter (MS5905RTE)	2.8"x2.5"x2.16"
Product Weight	Receiver	130g/0.29lb
	Transmitter (MS5905RTB)	35g/0.1lb
	Transmitter (MS5905RTD)	63g/0.14lb
	Transmitter (MS5905RTE)	63g/0.14lb
Certification	Receiver + Transmitter CE/ETL/RoHS	
Safety Rating	CAT II 600V	

Transmitter Model	B	D	E
AC Voltage Range	125V	230V	230V
GFCI	•		
Socket Tests	•	•	•
Receiver + Transmitter	Quickly and easily identify the breaker connected to a specific socket		
Transmitter (Socket Tester Mode) LED indication of the socket's wiring	Correct		
	Missing earth		
	Live-earth reverse		
	Live-neutral reverse		
Receiver built-in Non-Contact Voltage Detector (NCV)	Voltage Range: AC90V~AC600V		
	Frequency: 50Hz~60Hz		
	Detecting Distance: <30mm		
Receiver	Buzzer and LED instructions		



MS5905RTD

VOLTAGE:
AC 230 V



MS5905RTE

VOLTAGE:
AC 230 V



MS5905RTB

VOLTAGE:
AC 125 V

Thermometers

IR thermometers | Digital thermometers



INFRARED THERMOMETER (BODY-FOREHEAD)

IR TEMPERATURE:
32°C~42°C
89°F~108°F

■ MS6518

		MS6518
Specifications	Range	Accuracy
Temperature(Body)	32°C~42°C/89°F~108°F	±0.4°C/±0.7°F
Resolution		0.1°C/0.1°F
Repeatability		±0.1°C
Features		
Spectral Response	8-14 μm	•
MAX Distance	15cm	•
°C / °F Selection		•
Response Time	1 second	•
Relative Humidity	10%~90%	•
Data Logging	10 groups	•
Reading Hold		•
MEM		•
Display Backlight		•
LBD	Low Battery Display	•
General		
Power Supply	1×9V/6F22 Battery	
Product Size	142mm×92mm×47mm/5.6"×3.6"×1.85"	
Product Weight	135g/0.3lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- Battery and User's manual





INFRARED CAMERA

IR TEMP:
- 20°C ~ 400°C
- 4°F ~ 752°F

■ MS6561

IR Temperature

Temperature range	-20°C~400°C · -4°F~752°F
Accuracy	±2% or 2°C
Resolution	0.1 °C/°F
Emissivity	0.1~0.99
Distance to Spot Ratio (D:S)	30:1
React time	150ms
Spectral Response	8-14μm
Laser pointer	Dual Diverging Lasers, Frames Temp Measurement Area

Thermal Imaging

Space Resolution	11mrad
Shutter	auto
Image resolution (W×H)	4800 Pixels (80×60)
Spectral Response	8-14μm
Field of view (H×W)	50°×38.6°
Sensitivity	150mk
Frame rate	9Hz
Palette	Red, Rainbow, Black Heat, White Heat
Storage format	BMP Image

Digital Camera

Pixels	2 million pixels
Display mode	Thermal image / Mix / Digital camera
Storage	10,000 pictures
Photo compare	Thermal image comparing to Digital image

Features

Display Type	2.4" TFT LCD
Display resolution (W×H)	76800 Pixels (240×320)
APO	YES
Power interface	Micro-USB
Battery life	Ordinary Use: 5 days Continuous Use: 8 hours
Data transmission	Micro-USB 2.0
Memory Card	8GB microSD
Operating temperature	-1~45°C, 14~113°F
Anti drop test	2 meter
Tripod base	YES
IP Level	IP54

General

Power Supply	Lithium battery 3.7V, 2600mAh
Product Size (H*W*D)	190.0mm×63.0mm×103mm/7.48"×2.48"×4.0"
Product Weight	335g/0.74lb
Certification	CE/CB/FCC/FDA



Accessories included:

- Wrapping case
- Battery and User's Manual

Black & White



Rainbow



Red



It is the best choice for you to have a non-invasive and non-destructive way to aid early detection of potentially big problems.

- Pipework

Infrared thermography is a great tool for detecting faults in pipes and insulation. Heat exchangers are regularly checked with infrared to detect blocked pipes. A thermal imaging can quickly give an overview of the entire installation and it can expedite inspection of the equipment.

- Locate electrical problems

Infrared thermography makes technician or electrician easy to detect the issues with electrical connections, wiring or other system components, as they are clearly highlighted as "hot spots" with thermal imaging. You can clearly see the overheated connections on the thermal image.



INFRARED THERMOMETER

IR TEMPERATURE:
- 500°C / 932°F - 10:1
- 0.1°C / 0.1°F resolution - Emissivity 0.95

■ MS6522B

Specifications	Range	Accuracy
	-20~0°C/-4~32°F	±3°C/ ±5°F
IR Temperature	0~500°C	±(2%+2°C)
	32~932°F	±(2%+3°F)
Resolution		0.1°C/0.1°F
Repeatability		±0.1°C
Emissivity		0.95
Optical Resolution		10:1
Features		
Spectral Response	8-14 μm	•
Laser	<1mW / 630-670nm	•
°C/°F Selection		•
Response Time	1 second	•
Relative Humidity	10%~90%	•
Laser Target Pointer		•
Reading Hold		•
MAX		•
MIN/AVG		•
Display Backlight		•
LBD	Low Battery Display	•
General		
Power supply	2x1.5V AAA Batteries	
Product Size	143mmx99mmx47mm/5.6"x3.9"x1.85"	
Product Weight	135g/0.3lb	
The Default Temperature	(°C)Centigrade/(°F)Fahrenheit	
Certificate	CE/ETL/RoHS/FDA	



Accessories included:
- Battery and User's Manual



INFRARED THERMOMETER

IR TEMPERATURE:
-40°C-800°C
-40°C-1472°F

MAIN FEATURES:
-0.1-1.00 adjustable emissivity
-colour display

■ MS6531B

Specifications	Range	Accuracy
	-40~0°C/-40~32°F	±4°C/ ±7.2°F
IRT Temperature	0~400°C	±(1.5%+2°C)
	32~752°F	±(1.5%+3.6°F)
	400~800°C	±(2.0%+2°C)
	752~1472°F	±(2.0%+3.6°F)
Resolution	<199.9	0.1°C/0.1°F
	>199.9	1°C/1°F
Repeatability		±0.1°C
Emissivity		0.10~1.00
Optical Resolution		12:1
Color Display		
APO	Auto Power Off	•
Spectral Response	8-14 μm	•
Laser	<1mW / 630-670nm	•
°C/°F Selection		•
Response Time	0.5 second	•
Relative Humidity	10%~90%	•
Laser Target Pointer		•
High/Low	Alarm Setting	•
Reading Hold		•
Lock selection		•
MAX/MIN/AVG/DF		•
Display Backlight		•
LBD	Low Battery Display	•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	176mm×132mm×49mm/6.9"×5.2"×1.9"	
Product Weight	223g/0.5lb	
The Default Temperature	(°C) Centigrade/(°F) Fahrenheit	
Certificate	CE/ETL/RoHS	



Accessories included:
- Carry Bag
- Battery and User's manual





INFRARED AND K-TYPE THERMOMETER

IR TEMPERATURE: -40°C~800°C / -40°F~1472°F
K-TYPE TEMPERATURE: -40°C~1080°C / -40°F~1976°F

MS6531C

		MS6531C	
Specifications	Range	Accuracy	
IR Temperature	-40~0°C / -40~32°F	±4°C / ±7.2°F	
	0~400°C	±(1.5%+2°C)	
	32~752°F	±(1.5%+3.6°F)	
	400~800°C	±(2.0%+2°C)	
	752~1472°F	±(2.0%+3.6°F)	
K-Type Temperature	-40°C~1080°C	±(1.5%+3°C)	
	-40°F~1976°F	±(1.5%+5.4°F)	
Resolution	<199.9	0.1°C/0.1°F	
	>199.9	1°C/1°F	
Repeatability		±0.1°C	
Emissivity		0.10~1.00	
Optical Resolution		12:1	
Features			
Data Logging	20 groups	•	
Color Display		•	
APO	Auto Power Off	•	
Spectral Response	8-14 μm	•	
Laser	<1mW / 630-670nm	•	
°C/°F Selection		•	
Response Time	0.5 second	•	
Relative Humidity	10%~90%	•	
Laser Target Pointer		•	
High/Low	Alarm Setting	•	
Reading Hold		•	
Lock selection		•	
MAX/MIN/AVG/DIF		•	
Display Backlight		•	
LBD	Low Battery Display	•	
General			
Power Supply	1×9V 6F22 Battery		
Product Size	176mm×132mm×49mm/6.9"×5.2"×1.9"		
Product Weight	223g/0.5lb		
The Default Temperature	(°C) Centigrade/(°F) Fahrenheit		
Certificate	CE/ETL/RoHS		



Accessories included:

- K Type Thermocouple
- Carry Bag
- Battery and User's manual



INFRARED AND K-TYPE THERMOMETER

IR TEMPERATURE: -20°C~350°C / -4°F~662°F
K-TYPE TEMPERATURE: -50°C~300°C / -58°F~572°F

MS6541

		MS6541	
Specifications	Range	Accuracy	
IR Temperature	-50~0°C / -58°F~32°F	±4°C / ±7.2°F	
	0°C~400°C	±(1.5%+2°C)	
	32°F~752°F	±(1.5%+3.6°F)	
	400°C~760°C	±(2.0%+2°C)	
	752°F~1400°F	±(2.0%+3.6°F)	
K-Type Temperature	-50°C~300°C	±(1.5%+3°C)	
	-58°F~572°F	±(1.5%+5.4°F)	
Resolution	<1000	0.1°C/0.1°F	
	>1000	1°C/1°F	
Repeatability		±0.1°C	
Emissivity		0.10~1.0	
Optical Resolution		30:1	
Features			
Data Logging	100 groups	•	
Spectral Response	8~14μm	•	
Laser	<1mW / 630-670nm	•	
°C/°F Selection		•	
Response Time	<500ms	•	
Relative Humidity	10%~90%	•	
Laser Target Pointer		•	
High/Low	Alarm Setting	•	
APO	Auto Power Off	•	
MAX/MIN/AVG/DIF		•	
Reading Hold		•	
Display Backlight		•	
LBD	Low Battery Display	•	
General			
Power Supply	1×9V 6F22 Battery		
Product Size	MS6530T 194mm×162mm×56mm/7.6"×6.4"×2.2" MS6541 192mm×95mm×83mm/7.5"×3.7"×3.3"		
Product Weight	MS6530T 280g/0.6lb MS6541 275g/0.6lb		
The Default Temperature	(°C) Centigrade/(°F) Fahrenheit		
Certificate	CE/ETL/RoHS		



Accessories included:

- K Type Thermocouple
- Carry Bag
- Battery and User's manual



Accessories included:

- K type thermocouple
- Carry Bag
- Battery and User's manual



THERMOCOUPLE DIGITAL THERMOMETER

MAIN FEATURES:

- up to 750°C/1382°F
- K-type thermocouple
- 0.1°C/0.1°F resolution
- one channel

■ MS6500

		MS6500
Specifications	Range	Accuracy
Celsius CENTER IT VERTICALLY	-50~-40°C	±6°C
	-39.9~-20°C	±5°C
	-19.9~0°C	±3°C
	0~500°C	±(0.75%+2°C)
	500~750°C	±(1%+3°C)
Fahrenheit CENTER IT VERTICALLY	-58~4°F	±7°F
	-3~32°F	±4°F
	33~932°F	±(0.75%+4°F)
	932~1382°F	±(1%+5°F)
Resolution	°C/°F	0.1
Features		
Sample Rate		500mS
Display	counts	2000
Data Hold		•
Input	K-Type Thermocouples	•
LBD	Low Battery Display	•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	125.5mm×72mm×27mm/5.6"×2.8"×1.0"	
Product Weight	145g/0.30lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- K type thermocouple
- Battery and User's manual



THERMOCOUPLE DIGITAL THERMOMETER

MAIN FEATURES:

- One or two channels
- Up to 1,372°C/2,501°F
- 0.1°C/0.1°F resolution
- K, J, T, E thermocouple type

■ MS6511

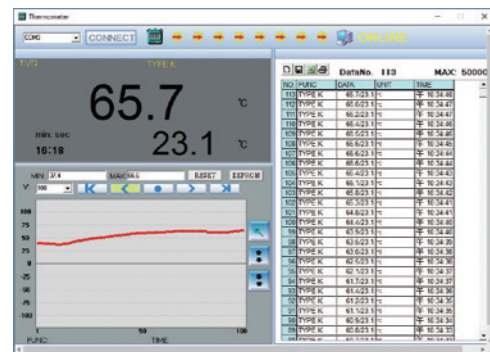
■ MS6512

		MS6511	MS6512
Specifications	Range	Accuracy	
Thermocouple Type	K -200~1372°C/-328~2501°F	Above -10°C: ±(0.5% + 0.5°C)	
	J -210~1200°C/-346~2192°F	Between -10°C~ -200°C: ±(0.5% + 1°C)	
	T -250~400°C/-418~752°F	Below -200°C: ±(0.5% + 1.5°C)	
	E -150~1000°C/-238~1832°F	T-type < -200°C for reference only	
Resolution	<1000	0.1°C/ 0.1°F/ 0.1k	
	>1000	1°C/ 1°F/ 1k	
Features			
Injection Method		Single	Dual
Channel		TC	T1/ T2/ T1-T2
APO	Auto Power Off		•
Data Hold			•
MAX/MIN/AVG			•
LBD	Low Battery Display		•
General			
Power Supply	1×9V 6F22 Battery		
Product Size	190mm×89mm×42mm/7.5"×3.5"×1.7"		
Product Weight	350g/0.8lb		
Certificate	CE/ETL/RoHS		



Accessories included:

- K type thermocouple
- USB interface cable
- Software CD
- Battery and User's manual



THERMOCOUPLE THERMOMETER WITH DATA LOGGING

MAIN FEATURES:

- One or two channels
- Up to 1,372°C/2,501°F
- K, J, T, E, R, S, N thermocouple type
- Data logging

- **MS6513**
- **MS6514**

Specifications	MS6513		MS6514	
	Range	Accuracy		
Thermocouple Type	K	-200~1372°C/-328~2501°F	K,J,T,E,N type	
	J	-210~1200°C/-346~2192°F	Above -10°C: ±(0.2% + 0.5°C)	
	T	-250~400°C/-418~752°F	Between -10°C~ -200°C: ±(0.2% + 1°C)	
	E	-150~1000°C/-238~1832°F	Below -200°C: ±(0.2% + 1.5°C)	
	R	0~1767°C/-32~3212°F	T-type < -200°C for reference only	
	S	0~1767°C/-32~3212°F		
	N	-200~1300°C/-328~2372°F	R,S type : ±(0.2% + 1°C)	
Resolution	<1000	0.1°C/ 0.1°F/ 0.1k		
	>1000	1°C/ 1°F/ 1k		
Features				
Injection Method		Single	Dual	
Channel		TC	T1/ T2 /T1-T2	
APO	Auto Power Off		•	
Data Logging	groups		1000	
Data Hold			•	
MAX/MIN/AVG			•	
MEM	Save current data		•	
USB Interface			•	
LBD	Low Battery Display		•	
General				
Power Supply	1×9V 6F22 Battery			
Product Size	190mm×89mm×42mm/7.5"×3.5"×1.7"			
Product Weight	350g/0.8lb			
Certificate	CE/ETL/RoHS			

THERMO-HYGROMETER

- | | | |
|----------------------|-----------------------|------------------|
| AMBIENT TEMP: | WET BULB TEMP: | HUMIDITY: |
| -20°C~60°C | -20°C~60°C | 0%~100&RH |
| -4°F~-140°F | -4°F~-140°F | |

- **MS6508**

Specifications	MS6508	
	Range	Accuracy
Ambient Temperature	-20°C~0°C/-4°F~32°F	±1°C/±1.8°F
	0°C~45°C/32°F~113°F	±0.5°C/±0.9°F
	45°C~60°C/113°F~140°F	±1°C/±1.8°F
Wet Bulb Temperature	-20°C~0°C/-4°F~32°F	±1.5°C/±2.7°F
	0°C~45°C/32°F~113°F	±1°C/±1.8°F
	45°C~60°C/113°F~140°F	±1.5°C/±2.7°F
Dew Point Temperature	-50°C~0°C/-58°F~32°F	±1.5°C/±2.7°F
	0°C~45°C/32°F~113°F	±1°C/±1.8°F
	45°C~60°C/113°F~140°F	±1.5°C/±2.7°F
Relative Humidity	0%~10%	±4.0%RH
	10%~90%	±3.0%RH
	90%~100%	±4.0%RH
Features		
Updated Rate		400ms
Data Logging	Data Logging and Recall	100
°C/°F Selection		•
MAX/MIN		•
Data Hold		•
Display Backlight		•
LBD	Low Battery Display	•
General		
Power Supply	4×1.5V AAA Batteries	
Product Size	184mm×60mm×29mm/7.2"×2.4"×1.1"	
Product Weight	154g/0.34lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- Carry Bag
- Battery and User's Manual





THERMO-HYGROMETER WITH DATA LOGGING

MAIN FEATURES:

- Up to 60°C/140°F
- 0.1°C/0.1°F resolution
- 16,300 groups
- RS232

■ **MS6505**

		MS6505
Specifications	Range	Accuracy
Temperature	-20°C~60°C	±0.7°C
	-4°F~140°F	±1.4°F
Relative Humidity	0~100%	±2.5% RH
Resolution	Temperature	0.1°C/°F
	Humidity	0.1%RH
Response Time	Humidity	75 Sec
	Temperature	40 Sec
Features		
Display	4 Digital Liquid Crystal Display	2000
APO	Auto Power Off	•
MAX/MIN		•
Clock		•
Data logging	16300 groups	•
Data Hold		•
Interface	RS-232	•
Display Backlight		•
General		
Power Supply	1×9V 6F22 Battery	
Product Size	183mm×74mm×42mm/7.3"×2.9"×1.6"	
Product Weight	330g/0.7lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- RS232 Date Line
- Software CD
- Carry Bag
- AC Adapter
- Battery and User's manual



Environmental Meters

- Light meters | Anemometers | Sound level meters
- Laser distance meters | Tachometers | Moisture meters
- Gas detectors | Multifunction environmental meters





LIGHT METER (LUX)

MAIN FEATURES:

- Up to 50,000 lux
- 1 lux resolution

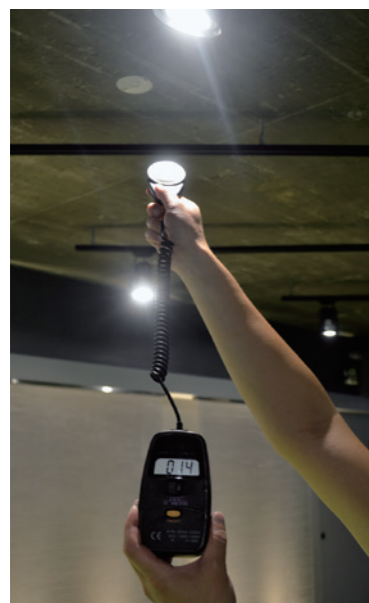
MS6610

MS6610			
Specifications	Range	Resolution	Accuracy
Measurement Range	0~1999 Lux	1 Lux	±(5%+2)
	2000~19990 Lux	10 Lux	±(5%+2)
	20000~50000 Lux	100 Lux	±(5%+2)
Features			
Display Counts			2000
Data Hold			•
Photo Detector	One Silicon Photo Diode with Filter		•
Lead Length	150cm (Approx)		•
LBI	Low Battery Indicator		•
General			
Power Supply	1×9V 6F22 Battery		
Product Size	126mm×72mm×27mm/5.0"×2.8"×1.0"		
Photo Detector Size	83mm×52mm×21mm/3.2"×2.0"×0.8"		
Product Weight	180g/0.4lb		
Certificate	CE/ETL/RoHS		



Accessories included:

- Battery and User's manual



LIGHT METER (LUX)

MAIN FEATURES:

- Up to 200,000 lux
- 0.01 lux resolution
- Lux, FC, CD indications
- LED light versions

MS6612
MS6612B
MS6612D

MS6612 MS6612B MS6612D				
Specifications	Range	Resolution	Accuracy	
Measurement Range	0~200000 Lux	0.01 Lux	±(3%+2)	
	0~20000 FC	0.01 FC	±(3%+2)	
	0~999900 CD	0.01 CD	±(3%+2)	±(3%+2)
Light Source	L0-Standard Lighting		•	•
	L1-LED Daytime Light		•	•
	L2-LED Red Light		•	•
	L3-LED Amber (yellow) Light		•	•
	L4-LED Green Light		•	•
	L5-LED Blue Light		•	•
	L6-LED Purple Light		•	•
Default Values	L7-L9-Default Standard Lighting		•	•
Features				
Display Counts			2000	
Auto Ranging	Auto & Manual		•	
APO	Auto Power Off		•	
MAX / MIN			•	
REL	Relative Measurement		•	
PEAK	Peak Measurement		•	
ZERO	Zero Calibration		•	
FC / Lux	FC / Lux / Unit Selection		•	
Data Hold			•	
Analog Bar	Analog Bar Indication		•	
LBD	Low Battery Display		•	
CD	CD Unit Selection		•	•
Wireless	APP connection			•
General				
Power Supply	1×9V 6F22 Battery			
Product Size	170mm×89mm×43mm/6.7"×3.5"×1.7"			
Product Weight	420g/0.93lb			
Certificate	CE/ETL/RoHS			

*For further information about SMARTPHONE Connection please check page 4.



Accessories included:

- Carry Bag
- Battery and User's manual





Accessories included:

- USB interface cable(MS6252B)
- Software CD(MS6252B)
- Carry Bag
- Battery and User's manual



*For further information about SMARTPHONE Connection please check page 4.



ANEMOMETERS

MAIN FEATURES:

- Wind speed
- Humidity
- Temperature
- Air volumen calculation

- MS6252A
- MS6252B
- MS6252D

Specifications	Range	Resolution	Accuracy
m/s(meter per second)	0.80~30.00 m/s	0.01 m/s	±(2.0%+50)
	30.00~40.00 m/s	0.01 m/s	Reference
km/h(kilometer per hour)	2.88~108.0 km/h	0.01 km/h	±(2.0%+50)
	108.0~144.0km/h	0.1 km/h	Reference
ft/s(feet per second)	2.62~98.50ft/s	0.01 ft/s	±(2.0%+50)
	98.5~131.2ft/s	0.01 ft/s	Reference
Knots(nautical miles per hour)	1.6~58.30knots	0.01 knots	±(2.0%+50)
	58.30~77.70knots	0.01 knots	Reference
mile/h(mile per hour)	1.8~67.20mil/h	0.01 mil/h	±(2.0%+5)
	67.20~90.00mil/h	0.01 mil/h	Reference
ft/m(feet per minute)	157.5~5900ft/m	1 ft/m	±(2.0%+5)
	5900~7874ft/m	1 ft/m	Reference
Temperature	-10°C~60°C	0.1°C	±1.5°C ±1.5°C
	14~140°F	0.1°F	±2.7°F ±2.7°F
Relative Humidity	(20~80%)RH	0.1%RH	±3.0% ±3.0%
	(<20 or >80%)RH	0.1%RH	±5.0% ±5.0%
Features			
Air Volume Unit	Range	Area	
	CFM: 0~999.9	0~9.999 ft²	•
	CMM: 0~999.9	0~9.999 m²	•
	CMS: 0~99.99	0~9.999 m²	•
Display Counts			9999
APO	Auto Power Off		•
Flow Area Setting			•
MAX / MIN			•
Data Hold			•
Display Backlight			•
LBD	Low Battery Display		•
°C/°F Selection			•
Ambient			•
Dew Point			•
Wet Bulb			•
Temperature			•
USB Interface	(Windows OS)		•
Wireless	APP connection		•
General			
Power Supply	1×9V 6F22 Battery		
Product Size	165mm×85mm×38mm/6.5"×3.3"×1.5"		
Product Weight	168g/0.37lb		
Certificate	CE/ETL/RoHS		

SOUND LEVEL METER

MAIN FEATURES:

- Fast/slow methods
- A/C weighting

- MS6708

Specifications	Range	Resolution	Accuracy
Sound Pressure	30dB~80dB	0.1dB	±1.5dB
	40dB~90dB	0.1dB	±1.5dB
	50dB~100dB	0.1dB	±1.5dB
	60dB~110dB	0.1dB	±1.5dB
	70dB~120dB	0.1dB	±1.5dB
	80dB~130dB	0.1dB	±1.5dB
Features			
Display Counts			2000
Auto Ranging	Auto & Manual		•
APO	Auto Power Off		•
Dynamic	50dB		•
Frequency	30Hz~8kHz		•
Sample Rate	2 times/second		•
Fast/Slow	125ms/1 sec		•
A/C Weighting			•
B.L.	Display Backlight		•
LBD	Low Battery Display		•
Analog Bar	Analog Bar Indication		•
UNDER/OVER	Over Range Indication		•
MAX			•
Data Hold			•
General			
Power Supply	4×1.5V AAA Batteries		
Product Size	193mm×60mm×29mm/7.6"×2.4"×1.1"		
Product Weight	222g/0.48lb		
Certificate	CE/ETL/RoHS		



Accessories included:

- Windscreen
- Carry Bag
- Battery and User's manual





SOUND LEVEL METER WITH DATA LOGGING

MAIN FEATURES:
- A/C weighting
- Data logging

MS6701

Specifications	Range	Resolution	Accuracy
Sound Pressure	30dB~80dB	0.1dB	±1.5dB
	40dB~90dB	0.1dB	±1.5dB
	50dB~100dB	0.1dB	±1.5dB
	60dB~110dB	0.1dB	±1.5dB
	70dB~120dB	0.1dB	±1.5dB
	80dB~130dB	0.1dB	±1.5dB

Features		
Display Counts		2000
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Dynamic	50dB	•
Frequency	30Hz~8kHz	•
Sample Rate	2 times / second	•
Fast / Slow	125ms / 1 sec	•
A / C Weighting		•
B.L.	Display Backlight	•
LBD	Low Battery Display	•
Analog Bar	Analog Bar Indication	•
UNDER / OVER	Over Range Indication	•
MAX		•
Date and Time	Date and Time Display	•
AC Signal Output	0.707 Vrms at FS (Auto-range mode isn't included) Output impedance approx. 600Ω	•
DC Signal Output	10mV/dB Output impedance approx.100Ω	•
AC Adapter	Supply Voltage : 9VDC Supply Current >100m ADC External Diameter 3.5mm	•
RS-232 Pclink		•
USB Interface		•
Data Logging	records	16000
General		
Power Supply	6×1.5V AAA Batteries	
Product Size	265mm×80mm×69mm/10.4"×3.15"×2.7"	
Product Weight	317g/0.7lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- Earphone plug
- Wapping case
- Windscreen
- Software CD
- RS232 interface cable
- Battery and User's manual



LASER DISTANCE METERS

MAIN FEATURES:
- Up to 100m
- Area and volumen calculation
- Data logging
- Class II laser

**MS6406 MS64100
MS6408 MS6404**

Specifications	Range			
	MS64100	MS6404	MS6406	MS6408
Distance	100M	40M	60M	80M
Accuracy	±1.5mm	±2.0mm		
Unit	m/inch/ft		m/inch/ft	
Features				
Measurement	Full mode - Pythagorean proposition measurement function			
Continuous	Continuous measurement			
Area/Volume	Area & volume calculation			
Add and subtract	Add and subtract measurement function			
Foot level	Auxiliary foot level measurement			
MIN/MAX	MIN and MAX measurement			
Backlight	Display backlight			
Laser	Assisted laser measurement			
Laser type	Class II, 635nm, <1mW			
Automatically cut off laser	20s			
Automatic shutdown	150s			
Data Logging	99 groups	30 groups		
General				
Power Supply	3×1.5V AAA Batteries	2×1.5V AAA Batteries		
Product Weight	175g/0.4lb	120g/0.26lb		
Product Size	120mm×60mm×28mm	112mm×50mm×25mm		
Certification	CE/ETL/FDA/RoHS			



MS6404



Accessories included:

- Portable Bag
- Battery and User's manual





MS6208A



MS6208B

CONTACT AND NON-CONTACT TYPE TACHOMETERS

RANGE (CONTACT): 50-19,999 RPM
RANGE (NON-CONTACT): 50-99,999 RPM

- MS6208A
- MS6208B

Specifications	Range	Resolution	Accuracy	
			MS6208A	MS6208B
Measurement	50~99.99 RPM	0.01 RPM	±(0.03%+2)	±(0.03%+2)
	100~9999.9 RPM	0.1 RPM	±(0.03%+2)	±(0.03%+2)
	10000~19999 RPM	1 RPM	±(0.03%+2)	
	10000~99999 RPM	1 RPM		±(0.03%+2)
Features				
Measuring Mode			Contact	Non-Contact
Measuring Distance	50mm~250mm			•
Idler wheel selection	6", 12", 0.1m		•	
Unit Selection	m/min, m/sec, ft/min, ft/sec, in/min		•	
APO	Auto Power Off			•
MAX/MIN				•
Data Logging	100 groups			•
Data Hold				•
Display Backlight				•
LBD	Low Battery Display			•
General				
Power Supply	4×1.5AAA Batteries			
Model	MS6208A	MS6208B		
Product Size	170mm×60mm×27mm/6.7"×2.4"×1.1"	155mm×60mm×27mm/6.1"×2.4"×1.1"		
Product Weight	130g/0.28lb	120g/0.26lb		
Certificate	CE/ETL/RoHS			

MOISTURE TESTER

MAIN FEATURES:
-Moisture up to 60%
-Relative humidity
-Ambient temperature
-Verification test points

- MS6900A

Specifications	Range	Accuracy
Material Moisture	0.0~60.0%	±2.0%
Ambient TEMP	-10°C~50°C/14°F~122°F	±2°C/±3.6°F
Relative Humidity	10~90%	±5.0%RH
Features		
Auxiliary	Verification Test Points	•
Depth	0~50mm	•
MAX/MIN		•
Sampling Rate	240mS	•
Unit Selection	%, WB, TD, °C, °F, %RH	•
Display Backlight		•
Data Hold		•
LBD	Low Battery Display	•
Materials Moisture Range		
1: (8.5~60%)	Beech, Spruce, Larch, Birch, Cherry, Walnut	
2: (6.8~53.4%)	Oak, Cedar, Maple, Ash Tree, Pink Shower Tree, Tamarisk	
3: (0.9~24.5%)	Smoothing Cement, Concrete	
4: (0.0~12.2%)	Anhydrite Screed	
5: (0.7~9.2%)	Cement Mortar	
6: (0.5~11.1%)	Lime Mortar, Plaster	
7: (0.0~17.8%)	Brick	
General		
Power Supply	2×1.5V AAA Batteries	
Product Size	130mm×56mm×29mm/5.1"×2.2"×1.1"	
Product Weight	120g/0.26lb	
Certificate	CE/ETL/RoHS	



Accessories included:

- Carry Bag
- Battery and User's manual



• Verification Test Point



Accessories included:

- Measurement idler wheels, touch tips and lengthening bar (MS6208A)
- Reflective sheeting (MS6208B)
- Carry bag
- Battery and User's manual



COMBUSTIBLE GAS DETECTOR

RESOLUTION: 50 ppm
ALARM: 10%~40%

MS6310

MS6310

Specifications

Resolution (methane)	50ppm
Alarm range	10%~40%
Warm Up Time	2 Minutes
Response time (40% LEL)	<2 Seconds

Features

Easy to Identify and Pinpoint Gas Leaks	•
Portable and High Sensitivity	•
Resume Original Measurement State after 7~10 minutes in Clear Air	•
Gas Detected: Natural gas, Methane, Ethane, Propane, Butane, Acetone, Alcohol, Ammonia, Steam, Carbon Monoxide, Gasoline, Jet Fuel, Hydrogen Solvents, Lacquer thinner, Naphtha	•

General

Power Supply	4×1.5V AA Batteries
Product Size	172mm×70mm×46mm/6.8"×2.8"×1.8"
Product Weight	354g/0.78lb
Certificate	CE/ETL/RoHS



Accessories included:

- Carry Bag
- Battery and User's manual



MULTIFUNCTION ENVIRONMENTAL METER

TEMPERATURE: -10~60°C, 14~140°F
HUMIDITY: 20~80%RH
SOUND LEVEL: 30~130dB(A)
AIR FLOW: 999,900 CMM/CFM
WIND SPEED: 0.5~20m/s
ILLUMINANCE: 0~50,000LUX

MS6300

MS6300

Specifications	Range	Resolution	Accuracy
Temperature	-10°C~60°C	0.1°C	±1.5°C
	14~140°F	0.1°F	±2.7°F
Relative Humidity	20%~80%RH	0.1%RH	±3.0%RH
	<20% or >80%RH	0.1%RH	±5.0%RH
Sound Level	30dB~130dB (A)	0.1dB	±1.5dB
	35~130dB (C)	0.1dB	±1.5dB
Illuminance	0~2000LUX	1LUX	±(5.0%+10)
	x10 (20000)	10LUX	±(5.0%+10)
	x100 (50000)	100LUX	±(5.0%+10)
Wind Speed	0.5~20m/s	0.1m/s	±(3.0%+10)
	1.8~72km/h	0.1km/h	±(3.0%+10)
	96~3942ft/min	1ft/min	±(3.0%+10)
Air Flow (CMM)	0~999900CMM	0.1CMM (<1000CMM)	±(3.0%+10)
		1CMM (>1000CMM)	±(3.0%+10)
Air Flow (CFM)	0~999900CFM	0.1CFM (<1000CFM)	±(3.0%+10)
		1CFM (>1000CFM)	±(3.0%+10)

Features

Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Area range	0~999.9 m ² , 0~999.9ft ²	•
Value	AVG/MAX/MIN/DIF (MAX-MIN)	•
A/C Weighting	Weighting Indication	•
Data Hold		•
B.L.	Display Backlight	•
LBD	Low Battery Display	•

General

Power Supply	1×9V 6F22 Battery
Product Size	280mm×89mm×50mm/11.0"×3.5"×2.0"
Product Weight	433g/0.95lb
Certificate	CE/ETL/RoHS



Accessories included:

- Windbreak
- Holder
- Wrapping case
- Battery and User's manual



Process Calibrators



THERMOCOUPLE CALIBRATOR

■ MS7220

THERMOCOUPLE TYPES:
- J, K, T, E, R, S, B, N

MS7220

Thermocouple Type	Range	Resolution
J	-200°C~1200°C/-328°F~2192°F	0.1°C/°F
K	-200°C~1370°C/-328°F~2498°F	0.1°C/°F
T	-200°C~400°C/-328°F~752°F	0.1°C/°F
E	-200°C~950°C/-328°F~1742°F	0.1°C/°F
R	-20°C~1750°C/-4°F~3182°F	1°C/°F
S	-20°C~1750°C/-4°F~3182°F	1°C/°F
B	600°C~1800°C/1112°F~3272°F	1°C/°F
N	-250°C~1300°C/-418°F~2372°F	0.1°C/°F

Millivolt Measure and Source (MAX input voltage:30V)

Mode	Range	Resolution	Accuracy
mV	-10mV~75mV	0.01mV	±(0.02%+2)

Temperature Measure and Simulate (MAX input voltage:30V)

Type	Resolution	Error	Reference junction Error
J,K,T,E,N	0.1°C/°F	±(0.3°C+10uV)	±0.2°C
R,S,B	1°C/°F	±(0.3°C+10uV)	±0.2°C

Features

Thermocouple Standard	NIST 175
Thermocouple Scales	ITS-90
Storage Temperature	-40°C~60°C
Operating Temperature	-10°C~55°C
Operating Altitude	3000 meters maximum
Temperature coefficient	±0.005% of range per °C for the temperature range -10~18°C and 28~55°C
Humidity	95% (10 °C to 30 °C) 75% (30 °C to 40 °C) 45% (40 °C to 50 °C)
Vibration	Random 2G, 5Hz~500Hz
Shock	1 Meter drop test
°C/°F Selection	Optional Temperature Unit Selection
LBD	Low Batter Display

General

Power Supply	1×9V 6LR61 Battery
Product Size	195mm×90mm×43mm/7.67"×3.54"×1.7"
Product Weight	367g/0.8lb
Certificate	CE/ETL/RoHS



Accessories included:

- Mini-plug TC Wire
- Wrapping Case
- Battery and User's Manual





Accessories included:

- Wrapping Case
- Battery and User's Manual



VOLTAGE AND CURRENT CALIBRATOR

DC VOLTAGE: 0~100mV, 0-10V
DC CURRENT: 0~24mA

MS7221

MS7221

Measurement and Output Voltage Parameter			
Function	Range	Resolution	Accuracy
DC Voltage	0~100mV	0.01mV	±(0.02%+2)
Input / Output	0.1~10V	0.001V	±(0.02%+2)
DC current	0~24mA	0.001mA	±(0.015%+4)
Input / Output			
Loop Power	24V	N/A	±10%
Features			
Storage Temperature	-40°C~60°C		
Operating Temperature	-10°C~55°C		
Operating Altitude	3000 meters maximum		
Temperature coefficient	±0.005% of range per °C for the temperature range -10~18°C and 28~55°C		
Humidity	95% (10 °C to 30 °C) 75% (30 °C to 40 °C)		
Vibration	Random 2G , 5Hz~500Hz		
Shock	1 Meter drop test		
LBD	Low Battery Display		
APO	Auto power off		
General			
Power Supply	1×9V 6LR61 Battery		
Product Size	190mm×89mm×42mm/7.5"×3.5"×1.7"		
Product Weight	350g/0.77lb		
Certificate	CE/ETL/RoHS		

MULTIFUNCTION PROCESS CALIBRATOR

MAIN FEATURES:
- TRMS digital multimeter functions
- Calibration functions: voltage, current, frequency

MS7212

MS7212

Specifications	Range	Resolution	Accuracy
DC Voltage	400mV	0.01mV	±(0.025%+10)
	4V/40V/300V	0.1mV/1mV/10mV	±(0.025%+5)
AC Voltage	400mV	0.01mV	±(0.7%+20)
	4V/40V/300V	0.1mV/1mV/10mV	±(0.8%+10)
DC Current	400mA	0.01mA	±(0.1%+10)
AC Current	400mA	0.01mA	±(0.7%+10)
Resistance	400Ω/4KΩ/40KΩ/400KΩ	0.01Ω/0.1Ω/1Ω/10Ω	±(0.1%+10)
	4Hz~999.9Hz	0.01Hz	±0.05Hz
	1000Hz~5kHz	0.01Hz /0.1Hz	±0.5Hz
Frequency	5kHz~30kHz	0.1Hz/1Hz	±2.0Hz
Temperature	-50°C~1300°C	0.1°C	±(0.3%+1°C)
Source Output			
DC Voltage Output	100mV	0.001mV	±(0.025%+0.03%)
	5.000V/15.000V	0.001V	±(0.025%+0.02%)
DC Current Output	25mA	0.001mA	±(0.02%+0.02%)
Frequency Output	20Hz~5kHz	0.01Hz /0.1Hz	±0.02%
Features			
Display counts			40000
Auto Ranging			•
Manual Ranging			•
REL	Relative Measurement		•
Continuity Buzzer	<50Ω		•
MAX/MIN/AVG			•
Display Backlight			•
Data Hold			•
RS232 Interface			•
USB Interface	Windows OS		•
LBD	Low Battery Display		•
General			
Power Supply	8×1.5V AA Batteries		
Product Size	224mm×172mm×59mm/8.8"×6.77"×2.28"		
Product Weight	1100g/2.2lb		
Certificate	RoHS		
Safety Rating	CAT II 600V		



Accessories included:



* External power supply (optional)

Phase Rotation Testers



MOTOR & PHASE ROTATION TESTER

- MAIN FEATURES:**
- LED indication
 - Missing phase indication
 - Built-in or attachable test leads

- MS5900
- MS5901

Specifications	Range	MS5900	MS5901
Nominal Voltage Rotary Direction	1~400V AC	●	●
Nominal Voltage Phase Indication	120~400V AC	●	●
Frequency	2~400Hz	●	●
Test Currents (In per phase)	Less than 3.5 mA	●	●
Built-in test leads			●
Features			
Operating TEMP	0~40°C	●	●
Operating Altitude	2000m	●	●
Pollution Degree	2	●	●
Relative Humidity	15~80%RH	●	●
General			
Power Supply	1×9V 6F22 Battery		
Product Size	130mm×72mm×32mm/5.1"×2.8"×1.3"		
Product Weight	MS5900: 193g/0.43lb MS5901: 252g/0.61lb		
Certificate	RoHS(MS5900) ETL/CE(MS5901)		
Safety Rating	CATIII 600V		

MS5900



MS5901



Accessories included:

- Test probes
- Test alligator clips
- Carry bag
- Battery and User's manual

LCR Meters



LCR METER WITH SMART TECHNOLOGY

RESISTANCE: 300Ω~30MΩ
CAPACITANCE: 3nF~30mF

■ MS8910

		MS8910	
Specifications	Range	Resolution	Accuracy
Resistance	300Ω/3kΩ/30kΩ/300kΩ/3MΩ	0.1Ω/1Ω/10Ω/100Ω/1kΩ	±(1.0%+2)
	30MΩ	10kΩ	±(1.2%+3)
Capacitance	3nF/30nF/300nF/3μF/30μF	1pF/10pF/100pF/1nF/10nF	±(2.0%+3)
	300μF/3mF/30mF	0.1μF/1μF/10μF	±(3.0%+3)
Features			
Display	counts		3000
Auto Ranging	Auto		•
APO	Auto Power Off		•
Data Hold			•
LBD	Low Battery Display		•
Auto Scanning			•
Diode Check	Open Voltage		2.8V
	Testing Current		2mA
Continuity Buzzer			30Ω
General			
Power Supply	1×3V CR2032 Battery		
Product Size	175mm×32mm×20mm/6.89"×1.26"×0.79"		
Product Weight	48g/0.10lb		
Certificate	CE/ETL/RoHS		



Accessories included:

- Spare Test Pin
- Wrapping Case
- Battery and User's Manual

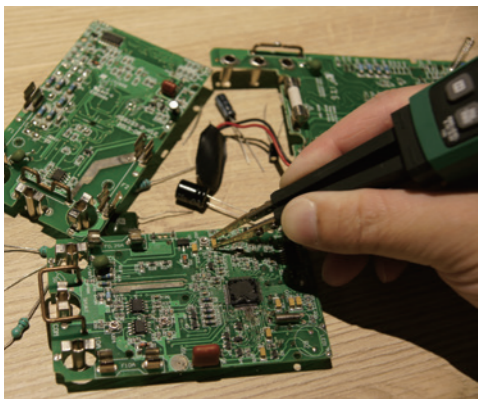


SMART



Accessories included:

- Battery and User's Manual



LCR METER WITH SMART TECHNOLOGY

RESISTANCE: 60Ω~20MΩ
INDUCTANCE: 600μH~200H
CAPACITANCE: 600pF~6mF

■ **MS8911**

MS8911

Specifications	Testing Voltage	Range	Resolution	Accuracy
Resistance	0.5V RMS	60Ω	0.01Ω	±(2.0%+10)
		600Ω/6kΩ/ 60kΩ/600kΩ	0.1Ω/0.001kΩ/ 0.01kΩ/0.1kΩ	±(1.0%+5)
		6MΩ/20MΩ	0.001MΩ/0.01MΩ	±(2.0%+5)
		0.1V RMS	60Ω	0.01Ω
	600Ω/6kΩ/ 60kΩ/600kΩ	0.1Ω/0.001kΩ/ 0.01kΩ/0.1kΩ	±(1.5%+5)	
	6MΩ/20MΩ	0.001MΩ/0.01MΩ	±(3.0%+5)	
Capacitance	0.5V RMS	600pF	0.1pF	±(2.0%+8)
		6nF/60nF/600nF	0.001nF/0.01nF/0.1nF	±(1.0%+5)
		6μF/60μF	0.001μF/0.01μF	±(2.0%+5)
		600μF	0.1μF	±(2.0%+10)
	6mF	0.001mF	±(2.0%+5)	
	0.1V RMS	600pF	0.1pF	±(2.0%+5)
6nF/60nF/ 600nF/6μF	0.001nF/0.01nF/ 0.1nF/0.001μF	±(1.5%+5)		
Inductance	0.5V RMS	600μH/6000μH	0.1μH/1μH	±(2.0%+5)
		60mH/600mH/ 6H/60H	0.01mH/0.1mH/ 0.001H/0.01H	±(1.0%+5)
		200H	0.1H	±(2.0%+5)
		0.1V RMS	600μH/6000μH	0.1μH/1μH
	60mH/600mH/6H	0.01mH/0.1mH/0.001H	±(1.5%+5)	
	60H	0.01H	±(1.0%+5)	
200H	0.1H	±(2.0%+5)		

Features

Display	counts	6000
Auto Ranging	Auto & Manual	•
APO	Auto Power Off	•
Data Hold		•
LBD	Low Battery Display	•
Auto Scanning		•

General

Power Supply	1×3V CR2450 Battery
Product Size	186mm×35mm×23.6mm/7.3"×1.38"×0.93"
Product Weight	90g/0.2lb
Certification	CE /ETL/RoHS

LCR METERS WITH MULTIMETER FORMAT

INDUCTANCE: 2mH~2H

CAPACITANCE: 2nF~200μF

■ **MY6243**

■ **MS6013**

MS6013 MY6243

Specifications	Range	Resolution	Accuracy
Capacitance	200pF	0.1pF	±(0.5%+1)
	2nF/20nF/200nF	1pF/10pF/100pF	±(0.5%+1) ±(1.0%+1)
	2μF/20μF/200μF	1nF/0.01μF/0.1μF	±(0.5%+1) ±(2.0%+1)
	2000μF	1μF	±(1.0%+1)
Inductance	20mF	10μF	±(2.0%+2)
	2mH/20mH/200mH	1μH/10μH/100μH	±(2.0%+1)
	2H	1mH	±(5.0%+1)

Features

LCD Display	counts	2000	2000
Zero Adjustment	approx. ± 20pF	•	
Input Jacks		•	•
Accuracy	High Accuracy in Measuring	•	•
LBD	Low Battery Display	•	•

General

Power Supply	1×9V 6F22 Battery
Product Size	189mm×91mm×31.5mm/7.4"×3.6"×1.2"
Product Weight	240g/0.52lb
Certification	CE/ETL/RoHS

MY6243



MS6013



Accessories included:

- Test Leads
- Holster
- Battery and User's Manual



AUTORANGING LCR METER WITH USB

RESISTANCE MEASUREMENT:	CAPACITANCE MEASUREMENT:	INDUCTANCE MEASUREMENT:
200MΩ	20mF	20kH

MS5308

MS5308

Features

Elevation	<2000m	•
Relative Humidity	<80%RH	•
Operating TEMP	0°C~40°C	•
Dua Display	20000(Main) and 2000(Secondary) counts	•
Auto Ranging	Auto & Manual	•
APO	Auto Power off	•
LCR	Auto LCR smart check and measurment	•
DCR	support DCR mode	•
Measurement mode	Series / Parallel measurement mode	•
B.LIGHT	Display Backlight	•
LDB	Low Battery Display	•
Data hold		•
RS232 interface		•

General

Power Supply	8×1.5 AA Batteries
Product Size	224mm×172mm×58mm/8.8"×6.8"×2.3"
Product Weight	841g/1.85lb
Certificate	CE / ETL / RoHs

Resistance Measurement				Capacitance Measurement				Inductance Measurement			
Frequency	Range	Resolution	Accuracy	Frequency	Range	Resolution	Accuracy	Frequency	Range	Resolution	Accuracy
100Hz/120Hz	200.00Ω	0.01Ω	1.0%+5d	100Hz/120Hz	20.000nF	1pF	1.0%+5d	100Hz/120Hz	20.000mH	1μH	1.0%+5d
100Hz/120Hz	2.0000kΩ	0.1Ω	0.3%+5d	100Hz/120Hz	200.00nF	0.01nF	0.5%+5d	100Hz/120Hz	200.00mH	0.01mH	0.5%+5d
100Hz/120Hz	20.000kΩ	1Ω	0.3%+5d	100Hz/120Hz	2000.0nF	0.1nF	0.5%+5d	100Hz/120Hz	2000.0mH	0.1mH	0.5%+5d
100Hz/120Hz	200.00kΩ	0.01kΩ	0.5%+5d	100Hz/120Hz	20.000μF	1nF	0.5%+5d	100Hz/120Hz	20.000H	1mH	0.5%+5d
100Hz/120Hz	2.0000MΩ	0.1kΩ	1.0%+5d	100Hz/120Hz	200.00μF	0.01μF	1.0%+5d	100Hz/120Hz	200.00H	0.01H	1.0%+5d
100Hz/120Hz	20.000MΩ	1kΩ	1.0%+5d	100Hz/120Hz	2000.0μF	0.1μF	2.0%+5d	100Hz/120Hz	2000.0H	0.1H	1.0%+5d
100Hz/120Hz	200.00MΩ	0.1MΩ	2.0%+5d	100Hz/120Hz	20.00mF	0.1mF	2.0%+5d	100Hz/120Hz	20.000KH	1H	2.0%+5d
1kHz	20.000Ω	0.001Ω	1.0%+5d	1kHz	2000.0pF	0.1pF	1.0%+5d	1kHz	2000.0μH	0.1μH	1.0%+5d
1kHz	200.00Ω	0.01Ω	0.3%+5d	1kHz	20.000nF	1pF	1.0%+5d	1kHz	20.000mH	1μH	0.5%+5d
1kHz	2.0000kΩ	0.1Ω	0.3%+5d	1kHz	200.00nF	0.01nF	0.5%+5d	1kHz	200.00mH	0.01mH	0.5%+5d
1kHz	20.000kΩ	1Ω	0.3%+5d	1kHz	2000.0nF	0.1nF	0.5%+5d	1kHz	2000.0mH	0.1mH	1.0%+5d
1kHz	200.00kΩ	0.01kΩ	0.5%+5d	1kHz	20.000μF	1nF	0.5%+5d	1kHz	20.000H	1mH	1.0%+5d
1kHz	2.0000MΩ	0.1kΩ	1.0%+5d	1kHz	200.00μF	0.01μF	1.0%+5d	1kHz	200.00H	0.01H	2.0%+5d
1kHz	20.000MΩ	1kΩ	2.0%+5d	1kHz	2000.0μF	0.1μF	1.0%+5d	1kHz	2000.0H	0.1H	5.0%+5d
1kHz	200.0MΩ	0.1MΩ	5.0%+5d	10kHz	200.00pF	0.01pF	1.0%+5d	10kHz	200.00μH	0.01μH	1.0%+5d
10kHz	20.000Ω	0.001Ω	1.0%+5d	10kHz	2000.0pF	0.1pF	1.0%+5d	10kHz	2000.0μH	0.1μH	0.5%+5d
10kHz	200.00Ω	0.01Ω	0.5%+5d	10kHz	20.000nF	1pF	1.0%+5d	10kHz	20.000mH	1μH	0.5%+5d
10kHz	2.0000kΩ	0.1Ω	0.3%+5d	10kHz	200.00nF	0.01nF	1.5%+5d	10kHz	200.00mH	0.01mH	1.5%+5d
10kHz	20.000kΩ	1Ω	0.5%+5d	10kHz	2000.0nF	0.1nF	2.0%+5d	10kHz	2000.0mH	0.1mH	2.0%+5d
10kHz	200.00kΩ	0.01kΩ	1.0%+5d	10kHz	200.00pF	0.01pF	2.0%+5d	10kHz	20.000H	0.001H	5.0%+5d
100kHz	20.000Ω	0.001Ω	1.0%+5d	100kHz	2000.0pF	0.1pF	1.0%+5d	100kHz	20.000μH	0.001μH	1.0%+5d
100kHz	200.00Ω	0.01Ω	1.0%+5d	100kHz	20.000nF	1pF	2.0%+5d	100kHz	200.00μH	0.01μH	2.0%+5d
100kHz	2.0000kΩ	0.1Ω	1.0%+5d	100kHz	200.00nF	0.01nF	5.0%+5d	100kHz	2000.0μH	0.1μH	2.0%+5d
100kHz	20.000kΩ	1Ω	2.0%+5d					100kHz	20.000mH	1μH	2.0%+5d
								100kHz	200.00mH	0.01mH	5.0%+5d



Accessories included:

- Kelvin Test Clip
- SMD Test Probe
- IR Data Line
- Software CD
- External power supply (optional)
- User's manual

Circuit Analyzers



CIRCUIT ANALYZER

MAIN FEATURES:

- Single phase circuits
- Impedance
- RCD/GFCI testing
- Voltage drop

- MS5908A
- MS5908C

Specifications	MS5908A		MS5908C	
	Range	Resolution	Accuracy	
Line Voltage	85.0~135.0V	85.0~265.0V	0.1V	±(1.0%+2)
Peak Line Voltage	120.0~190.0V	120.0~375.0V	0.1V	±(1.0%+2)
Voltage With Loading Equipments	10.0~135.0V	10.0~265.0V	0.1V	±(2.5%+2)
Line Frequency	45.0~65.0Hz		0.1Hz	±(1.0%+2)
Impedance-live and Neutral & Earth	0.00~3.00Ω		0.01Ω	±(2.5%+2)
	>3.00Ω		0.01Ω	No ensure
Neutral-Ground Voltage	0.0~10.0V		0.1V	±(2.5%+2)
RCD Trip Time	1ms~6.5S		1mS	±(1.0%+2)
RCD Trip Current	30mA~37mA		0.1mA	±(1.0%+2)
GFCI Trip Time	1ms~6.5S		1mS	±(1.0%+2)
GFCI Trip Current	6mA~9mA		0.1mA	±(1.0%+2)
Voltage Drop	0.1~99.9%		0.1%	±(2.5%+2)
Voltage Drop Load Current	12/15/20A	5/8/10A		
General				
Power Supply	6×1.5V AAA Batteries			
Product Size	194mm×78mm×37mm/7.64"×3.07"×1.46"			
Product Weight	254g/0.56lb			
Certificate	CE/ETL/RoHS			
Safety Rating	CAT III 300V			

MASTECH®
BUILD TO PRECISION



Accessories included:

- Power Cord
- Carry Bag
- Battery and User's Manual



ACCESSORIES TEST LEADS

T3022



Straight Type & Right Angle Type
Length: 1000mm

Plug: ϕ 4.5mm
Wire: UL 1803/18AWG
MAX 10A

T3030U



Probe Length: 143mm/ ϕ 10mm
Length: 1000mm
Tip: ϕ 2mm

Plug: ϕ 4.5mm
Wire: UL 1803/18AWG
MAX 10A

T3033U



Probe Length: 119mm/ ϕ 9mm
Length: 800mm
Tip: ϕ 2mm

Plug: ϕ 4.5mm
Wire: UL 1803/20AWG
MAX 10A

T3060A



Probe Length: 132mm/ ϕ 10mm
Right Angle Type, M4 screw
Length: 1000mm
Tip: ϕ 2mm

Plug: ϕ 4.5mm
Wire: UL 1803/18AWG
MAX 10A

T3060B



Probe Length: 132mm/ ϕ 10mm
Right Angle Type, M4 screw
Length: 1500mm
Tip: ϕ 2mm

Plug: ϕ 4.5mm
Wire: UL 1803/18AWG
MAX 10A

T3103



Straight Type
Length: 1340mm

Plug: ϕ 4.5mm
Wire: UL 1803/18AWG
MAX 10A

ACCESSORIES THERMOCOUPLES

MASTECH[®]

P3401



Length: 1000mm
Range: -40-260°C (-40-500°F)

P3408A



Length: 1000mm
Range: -40-260°C (-40-500°F)
Plug length: 12mm

P3408B



Length: 1000mm
Range: -40-260°C (-40-500°F)
Plug length: 16mm

P3409A



Length: 1000mm
Range: -40-600°C (-40-1112°F)
Plug length: 12mm

P3409B



Length: 1000mm
Range: -40-600°C (-40-1112°F)
Plug length: 16mm

P3410



Length: 1000mm
Range: -40-600°C (-40-1112°F)

P3412



Length: 1000mm
Range: -40-260°C (-40-500°F)

ACCESSORIES

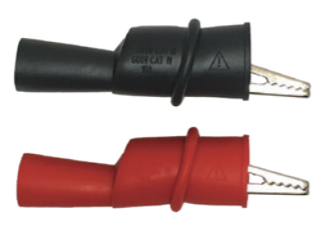
CLIPS & THERMOCOUPLE ADAPTERS

C3107 Big Mouth Alligator Clip



Length: 87mm
 ø4mm cross plug
 Max 32A

C3109A Alligator Clip



Length: 61.5mm
 with M4 screw

C3109B Medium Alligator Clip



Length: 55mm
 with M4 screw

C3112 IC Test Clip



Length: 185mm
 Plug: ø4mm Jack
 Max 5A

MS3204 Thermocouple Adapter



k Type
 Cx Type
 Lx Type
 hFE Type

MS3209 Thermocouple Adapter



k Type

ACCESSORIES

DATA CABLES & FUSES

R3403 Data Line



Length: 1000mm
 (For MS2205)

R3405 Data Line



Length: 1000mm
 (For MS5308, MS7212, MS6701)

R3407 Data Line



Length: 1000mm
 (For MS8040, MS8050)

R3417 Data Line



Length: 1000mm
 (For MS5215, MS2308)

F3925 Fuse

ø5×20mm



F 250mA, 250V -VDE
 F 400mA/10A, 250V -TUV

F3930A Fuse

ø5.5×21mm



F 250mA/400mA, 300V -UL

F3930B Fuse

ø6×32mm



F 10A, 300V -UL

F3900A Fuse

ø6.3×32mm



FF 250mA/400mA/600mA, H 1000V -TUV
 FF 250mA/400mA/600mA, H 1000V -UL

F3900B Fuse

ø10×38mm



FF 250mA/400mA/630mA/10A, 1000V -UL

F3960 Fuse

ø6.3×32mm



FF 200mA/250mA/10A, H 600V -TUV
 FF 250mA/400mA/600mA/10A, H 600V -UL

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