Excellence Level



XSR Precision Balances

Go Beyond Weighing



Trust in Quality When You Need the Job Done

Whether you need to weigh several kilograms or just a few grams, XSR precision balances offer a winning combination of reliable performance and truly ergonomic operation.

Even under the harshest of weighing conditions, you can rely on these robust balances to help you meet your productivity targets.

Maximum productivity



Reliable performance, ergonomic weighing processes and easy data transfer ensure you get the accurate results you want quickly and efficiently.

Robust performance



These solid balances will give you accurate results under all weighing conditions.

Ergonomic operation



XSR balances are easy and comfortable to use, protecting your health during your daily weighing tasks.



Patented weighing technologies ensure accurate results whilst ergonomic design features and accessories provide you with outstanding comfort to enable you to efficiently carry out your daily tasks.

High Sample Throughput Even in Tough Conditions

Hit your workload head-on with XSR balances. These robust workhorses are ideal when you have high sample throughput and tight timelines. XSR balances get the job done, no matter how difficult the weighing conditions.

The innovative SmartPan[™] weighing pan minimizes the effects of air currents on the weighing cell to dramatically improve stabilization time and repeatability, even when working in a fume hood or challenging production environment.

Reduced process steps



Under standard conditions, 1 mg readability balances with SmartPan can be used without a draft shield. In a fume cupboard, the draft shield doors can be left open during weighing-in. Process steps are reduced, and weighing is faster and more ergonomic.

Intuitive operation



'Swipe' through menus and tasks just like your smartphone. Setup shortcuts to provide fast access to your own saved weighing methods. Use multiple fingers to type in data. Easy to operate, even through thick chemically resistant gloves.

Error-free data transfer



Manual recording is a thing of the past. Results and task parameters are displayed on the results notepad. Using USB they can be transferred quickly and without error to a PC or software application. LabX offers comprehensive data management.



White paper: learn more about working without a draft shield, even under tough conditions www.mt.com/wp-smartpan

Durable Balances You Can Rely on Day after Day

Tough jobs need tough equipment. XSR precision balances have been designed to withstand harsh chemicals, dust and dirt. Even splashing liquids are no match for XSR. Built-in overload protection safeguards the weighing cell against accidental overload.

When personnel are busy and under pressure, trust in XSR to deliver reliable performance and maximum uptime.

Overload protection



The proven Monobloc[™] weighing cell delivers fast and precise results. Integrated overload protection safeguards the weighing cell and helps ensure a long balance lifetime.

Chemical resistance



The full metal housing protects against damage from harsh chemicals enabling you to focus on your job without worrying about the balance.

All-round robustness



These tough balances are not only robust in construction, but also offer high performance even in the tough weighing conditions of a fume hood, next to a production line or in areas with high people traffic.



Checklist: get valuable tips and tricks to ensure successful precision weighing www.mt.com/xsr-precision

Expertly Designed to Protect Your Health

XSR precision balances provide a high level of comfort as you carry out your daily tasks. Even the smallest balance features have been carefully designed to ensure your weighing processes are as ergonomic as possible.

No longer having to suffer the stresses and strains from working for long periods in front of the balance, users are more efficient – and you benefit from increased output.

Comfortable operation



Placing the display at eye-level on the adjustable ErgoStand[™] saves space and helps maintain good posture by eliminating excessive bending of the neck during extended periods of balance use.

Easy-read display



The large figures on the display are bright and clear to read. Eyes don't get tired and operators remain focused on their weighing tasks.

Safe cleaning



The innovative SmartPan weighing pan and drip tray underneath dismantle easily. Any spilled substances remain in the tray for safe disposal and easy cleaning.



Checklist: evaluate your workplace and benefit from valuable tips to optimize weighing ergonomics www.mt.com/labtec-ergonomics

Three Steps to Consistently Accurate Results

As a key step in your workflow, accurate weighing is essential to ensure you deliver quality products in a cost-effective manner. In accordance with our globally recognized Good Weighing Practice[™] (GWP[®]), METTLER TOLEDO's Sales and Service team can help you achieve accurate and reliable weighing results in three simple steps.

Moreover, our expertise means you can enjoy top weighing performance, maximum uptime and full compliance with the norms and standards relevant to your industry, all the while maintaining budget control.



Good Weighing Practice™

GWP is a scientific methodology applicable to all weighing equipment from any manufacturer.

1. Selection



Our free GWP® Recommendation service provides documentary evidence that the selected balance meets your specific process, quality and regulatory requirements. It gives you the knowledge you need to make the correct balance purchase decision.

2. Installation

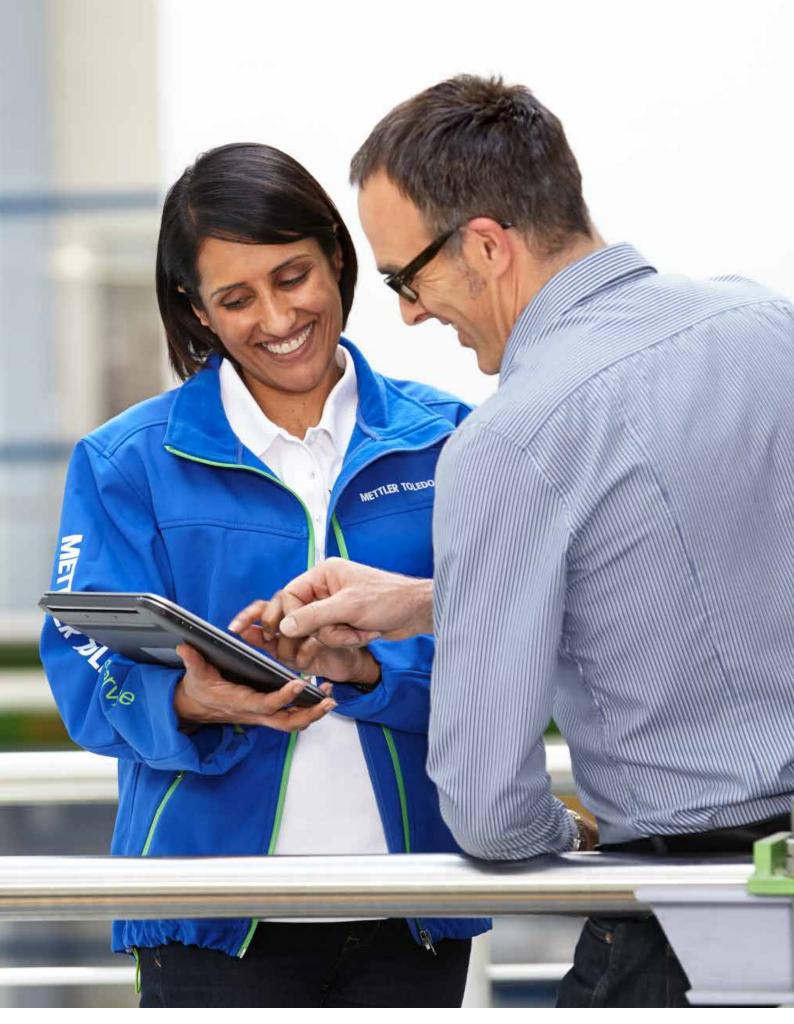


Our Installation Pacs document balance installation and qualification in accordance with regulations and provide guidance on controlling environmental influences that may affect accuracy. The integral user training ensures balances are used correctly from day one.

3. Calibration and testing



Balance calibration is at the core of accurate results. Our GWP® Verification service proves balance accuracy on-site and includes an optimal routine testing and calibration schedule, specification of the required test weights, and the ideal maintenance plan.



Tips and tricks: 11 reasons to adopt a proactive maintenance approach
www.mt.com/lab-maintenance-benefit

Small Details. Big Difference. Accessories and Features

METTLER TOLEDO balances can be customized with accessories and peripheral devices to meet the needs of virtually any application. Our carefully design accessories make your work easier, reduce fatigue and increase accuracy and productivity.

Small details. Big difference. View our range of over 200 accessories online.

Printers



The P-50 family of printers generate fast, high-quality printouts on paper, continuous label and individual labels with IDs and barcodes.

LabX software



Benefit from step-by-step user guidance on the instrument, automatic data handling and full process security for multiple instruments – all with one software.

Barcode reader



Read in sample and user IDs quickly and without error with a handheld barcode reader.

Terminal stand



Place your terminal on a stand which is quickly mounted at the back of your balance. The display is easier to read and good posture is maintained.

Protective covers



Disposable terminal and platform covers protect your balance and help avoid cross-contamination. A dust cover shields your balance when not in use.

CarePacs



CarePac certified weight sets fully support routine testing to limit the risks of working outside process tolerances. www.mt.com/carepacs

Features

Weighing Performance

- Max capacity from 300 g up to 32 kg
- Readability from 1 mg to 1 g
- SmartPan weighing pan

Quality Assurance

- Customizable tolerance profiles, with pre-defined quality and weighing settings
- MinWeigh warning function
- Balance ready StatusLight™
- LevelControl: level warning with graphical leveling guide
- Temperature and time programmable automatic adjustment (proFACT)
- Password protected configuration

Efficient Operation

- 4.3 inch color capacitive touchscreen terminal, glove compatible
- Storage of weighing methods
- Integrated results notepad

Seamless Process

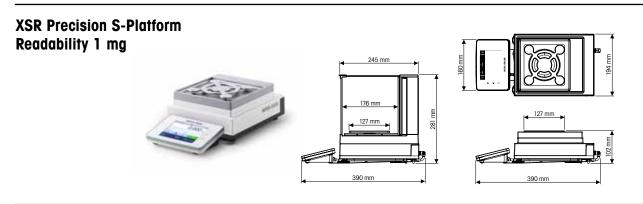
- Multiple interfaces for easy connectivity and data export: 4 x USB, 1 LAN
- Easy connection of peripheral devices: printers, PC, barcode readers, footswitches and sensors
- Export of process and results data to XML or Excel

Sustainable Value

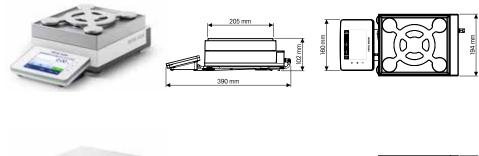
- Integrated overload protection
- Chemically resistant materials
- Designed for easy cleaning

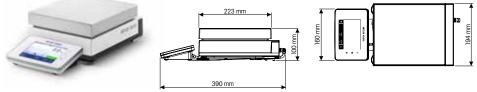
Description of selected accessories	Material No.
Printers and Barcode Readers	
P-52 RUE Dot matrix printer; RS232, USB, Ethernet, optional BT	30237290
P-56 RUE Thermal direct printer, RS232, USB, Ethernet, optional BT	30094673
P-58 RUE Thermal direct printer; RS232, USB, Ethernet, optional BT	30094674
USB barcode reader	30417466
Draft-Shields	
Pro-Draft shield, for 0.1 mg and 1 mg models, H = 248 mm	30300926
MagicCube draft shield for 1 mg models, H = 175 mm	30300928
Stands and Wall Mountings	
Terminal stand for placement of terminal 30 cm above weighing pan, model with S-platform**	30125077
Terminal stand for placement of terminal 30 cm above weighing pan, model with L-platform**	30125333
Terminal wall mounting bracket for XSR terminal, incl. terminal extension cable**	30138798
**Requires XSR terminal adapter	30300956
Sensors, Switches, Cables and Interfaces	
Bluetooth adapter, connects via USB	30416089
ErgoSens: Infrared sensor for touch-free remote operation (USB connection)	30300915
Footswitch: Switch for remote operation (USB connection)	30312558
USB-RS232 Converter: Connects peripheral devices to the balance via RS232	64088427
Weighing Pans	
Weighing pan for 10 mg S-Models, 172x205 mm	30215056
Weighing pan, incl. pan support, for 0.1 g S-Models, 190x223 mm	11132655
Protective Covers	
Protective cover for S-platforms, 10 mg, and 0.1 g	30300966
Protective cover for S-platforms, 1 mg	30300967
Protective cover for XSR terminal	30300968
Protective cover for standard weighing pan, S-platforms, 10 mg (172X205 mm)	30106207
Protective cover for standard weighing pan, S-platforms, 0.1 g (190X223 mm)	30106204

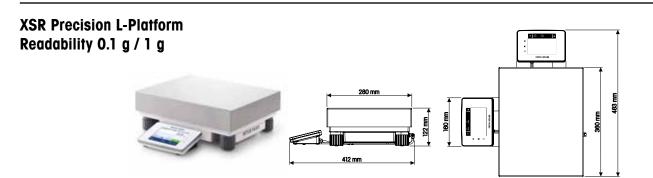
XSR Precision Balances Technical Specifications



XSR Precision S-Platform Readability 0.01 g / 0.1 g









SmartPan models

SmartPan weighing pans minimize the effects of air drafts on the weighing cell significantly improving stability and measurement accuracy.

	XSR303SN ²	XSR303S	XSR603SN ²	XSR603S	XSR1203S
Material number	30316500	30315757	30316544	30316497	30316567
Maximum capacity	310 g	310 g	610 g	610 g	1210 g
Readability	1 mg	1 mg	1 mg	1 mg	1 mg
Repeatability	0.5 mg	0.5 mg	0.5 mg	0.5 mg	0.4 mg
Settling time'	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s
Minimum weight ¹ (5% load, k=2, U=1.0%)	100 mg	100 mg	100 mg	100 mg	82 mg
USP minimum weight ¹ (5% load, k=2, U=0.10%)	1 g	1 g	1 g	1 g	820 mg
Weighing pan	SmartPan	Standard pan, SmartPan	SmartPan	Standard pan, SmartPan	Standard pan, SmartPan

¹ Typical value ² Supplied without draft shield (avalable as an accessory)

	XSR1202S	XSR2002S	XSR4002S	XSR6002SDR	XSR6002S
Material number	30317127	30317407	30317443	30317462	30317453
Maximum capacity (full range/fine range)	1210 g	2.1 kg	4.1 kg	6.1 / 1.2 kg	6.1 kg
Readability (full range/fine range)	0.01 g	0.01 g	0.01 g	0.1 / 0.01 g	0.01 g
Repeatability	4 mg	4 mg	4 mg	5 mg	4 mg
Settling time ¹	1.2 s				
Minimum weight ¹ (5% load, k=2, U=1.0%)	820 mg	820 mg	820 mg	1 g	820 mg
USP minimum weight ¹ (5% load, k=2, U=0.10%)	8.2 g	8.2 g	8.2 g	10 g	8.2 g
Weighing pan	Standard pan, SmartPan				

¹ Typical value

	XSR10002S	XSR4001S	XSR6001S	XSR6001S XSR8001S	
Material number	30317437	30317501	30317496	30317515	30317487
Maximum capacity	10.1 kg	4.1 kg	6.1 kg	8.1 kg	10.1 kg
Readability	0.01 g	0.1 g	0.1 g	0.1 g	0.1 g
Repeatability ¹	4 mg	40 mg	40 mg	40 mg	40 mg
Settling time ¹	1.5 s	0.8 s	0.8 s	1 s	1 s
Minimum weight ¹ (5% load, k=2, U=1.0%)	820 mg	8.2 g	8.2 g	8.2 g	8.2 g
USP minimum weight ¹ (5% load, k=2, U=0.10%)	8.2 g	82 g	82 g	82 g	82 g
Weighing pan	Standard pan, SmartPan	Standard pan	Standard pan	Standard pan	Standard pan

¹ Typical value

XSR10001L	XSR16001L	XSR32001LDR	XSR32001L	XSR16000L	XSR32000
30317536	30317549	30316472	30316297	30316481	30316489
10.1 kg	16.1 kg	32.1 / 6.4 kg	32.1 kg	16.1 kg	32.1 kg
0.1 g	0.1 g	1/0.1 g	0.1 g	1 g	1 g
40 mg	40 mg	40 mg	40 mg	400 mg	400 mg
1.5 s	1.5 s	1.5 s	1.5 s	1.2 s	1.2 s
8.2 g	8.2 g	8.2 g	8.2 g	82 g	82 g
82 g	82 g	82 g	82 g	820 g	820 g
Standard pan	Standard pan	Standard pan	Standard pan	Standard pan	Standard
	30317536 10.1 kg 0.1 g 40 mg 1.5 s 8.2 g 82 g	30317536 30317549 10.1 kg 16.1 kg 0.1 g 0.1 g 40 mg 40 mg 1.5 s 1.5 s 8.2 g 8.2 g 82 g 82 g	30317536 30317549 30316472 10.1 kg 16.1 kg 32.1 / 6.4 kg 0.1 g 0.1 g 1 / 0.1 g 40 mg 40 mg 40 mg 1.5 s 1.5 s 1.5 s 8.2 g 8.2 g 8.2 g 82 g 82 g 82 g	30317536 30317549 30316472 30316297 10.1 kg 16.1 kg 32.1 / 6.4 kg 32.1 kg 0.1 g 0.1 g 1 / 0.1 g 0.1 g 40 mg 40 mg 40 mg 40 mg 1.5 s 1.5 s 1.5 s 1.5 s 8.2 g 8.2 g 82 g 82 g	30317536 30317549 30316472 30316297 30316481 10.1 kg 16.1 kg 32.1 / 6.4 kg 32.1 kg 16.1 kg 0.1 g 0.1 g 1 / 0.1 g 0.1 g 1 g 40 mg 40 mg 40 mg 400 mg 400 mg 1.5 s 1.5 s 1.5 s 1.2 s 8.2 g 82 g 82 g 82 g 82 g

¹ Typical value

Benefit From Our Weighing Expertise

With decades of experience in laboratory weighing, METTLER TOLEDO offers you a wide range of online learning resources. Take advantage of our expertise to enhance your weighing know-how and make the most of your balance. Check out the documentation on our website for a range of relevant materials.



Laboratory Expertise

Valuable know-how is at your fingertips on our competence pages. Learn about:

- USP Revisions
- Electrostatic Influences
- Calibrating Your Weighing Device

www.mt.com/lab-expertise



eLearning

Online training is a cost effective way to train new employees and fulfill GLP/GMP/ISO re-training requirements. Get going with:

- USP Compliance
- Lab Balances External Influences and Cleaning

www.mt.com/lab-elearning



On-demand Webinars

Learn directly from our weighing experts and guest speakers. It's easy to register.

For starters, we recommend:

- Minimizing Out-of-Specification Errors
- Good Weighing Practice
- Calibration of Laboratory Instruments

www.mt.com/webinars

www.mt.com/xsr-precision

For more information

GWP[®]

Good Weighing Practice™

The global weighing guideline GWP® reduces risks associated with your weighing processes and helps to

- choose the appropriate balance
- reduce costs by optimizing testing procedures
- comply with the most common regulatory requirements

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