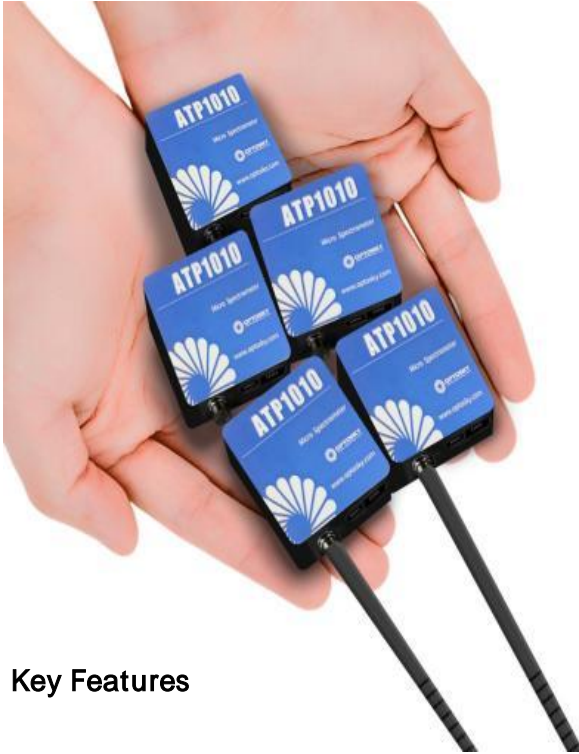


# ATP1010 OEM Microspectrometer

Amazing Spectral Analysis in a Tiny Footprint



## Key Features

**Full Spectral Analysis in a Small Footprint**  
CMOS-based unit is less than 50 mm (2 ") square, weighs just 60 g

### Ideal for OEM Devices

Compact unit available at low cost and reproducible in large production quantities

### Remarkable Performance

Meets or exceeds optical resolution, stability, sensitivity and other performance criteria associated with larger, more expensive spectrometers

### Built-in Shutter

Convenient feature for making dark measurements

Sensor	
Type	Hamamtsu S13014 Linear CMOS
Spectral Range	180-1100 nm Customize
Effective pixel	512
Pixel size	14 × 200 μm
Sensitivity	1300 V/(lx·s)
Dark Noise	13 RMS @ 13 °C
Optical Parameters	
Wavelength	200-400nm, 350-800nm, 300-1100nm, 800-1000 nm, optional
Resolution	0.2-5 nm (Slit size & spectral range)
SNR	> 450:1
Dynamic Range	10000: 1
Optical Path	
Optical Design	F/4 Crossed C-T
Focal Distance	28 mm for incidence / 28 mm for output
Slit size	5, 10, 25, 50, 100, 150, 200 μm , others customized
Input interface	SMA905 or free space
Electrical Parameters	
Integration Time	1 ms ~ 10 min
Data Port	USB 2.0 or UART
ADC bit depth	16 bit
Power Supply	DC 4.5 5.5 V (type @5V)
Working current	<200 mA
Storage Temp.	-20°C to +70°C
Operating Temp	-10°C to +50°C
Working Humidity	< 90%RH
Physical parameters	
Size	45×40×24 mm3
Weight	60 g

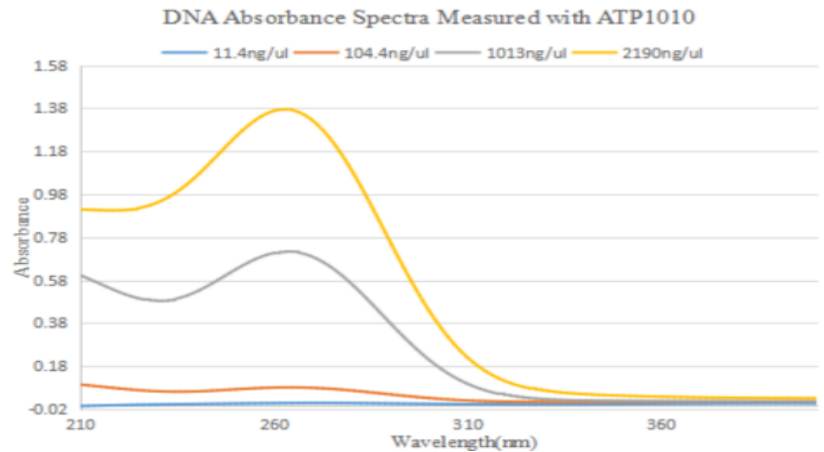


## Small Size. Big Performance.

With a unique optical design and sensitive CMOS array detector, ATP1010 delivers a high signal-to-noise ratio (>450:1) and a wide dynamic range (10000:1), making it ideal for measurements from low-concentration absorption to high intensity light and laser characterization. For ATP1010 190-900 nm, OEM users enjoy an instrument tailored to their application need.

### At a Glance

Size: 45 x 40 x 24 mm  
 Weight: 60 g  
 Wavelength range: 190-900 nm  
 Signal-to-noise ratio: >450:1  
 Dynamic range: 10000:1



## Markets and Applications

ATP1010 is conceived as a low-cost, high-performance spectrometer for OEM and high-volume applications where one or more wavelengths are being monitored and customers seek a highly reproducible result. Life sciences, medical diagnostics, solid state lighting and environmental analysis are among the industries where ATP1010 is an attractive alternative to filter-based optical sensing systems and other microspectrometers.

SATP1010 has very good optical resolution, wavelength and thermal stability, making it a great choice for LED and light source characterization, as well as absorbance/transmission measurements in process and other industries

### Sample Results with ATP1010 OEM Microspectrometer

