

SPECTROMETERS



- State-of-the-art Performance in a Miniaturized Package
- Easy-to-use Functions by PC control
- Available to the Diverse Applications

Spectrometers

A family of array-based spectrometers delivering computer controlled state-of-the-art-performance in a miniaturized package. These light-weight portable spectrometers are perfect for on-the-move applications.



SP245



SP642, SP642-NIR



SP303



SP304

Features

- Scientific-grade performance
- Low dark noise and stray light
- Flexible optical input: direct to slit or via fiber
- Optimum performance for a wide range of application
- High speed data acquisition
- Light-weight, portable, minaturized device

Full Specifications

		SP245	SP642	SP642-NIR	SP303	SP304
Wavelength Range		200 -1050 nm	200 -1050 nm	200 -1200 nm	200 -1050 nm	900 -1700 nm
Sensor		Sony ILX511	Hamamatsu S10420-1106 (Non TE-Cooled Backthinned FFT CCD)	Hamamatsu S10420-1106	Hamamatsu S7031-10065 (TE-Cooled Backthinned FFT)	Hamamatsu G3204-512
Detectors	No. of pixel	2048	2048 x 64	2048 x 64	1024 x 58	512
	Pixel Size	14 x 200 μm	14 x 14 μm	14 x 14 μm	24 x 24 μm	25 x 500 μm
	Cooling	X	X	X	O (-10 °C one stage TE cooling)	O (-20 °C one stage TE cooling)
Dark Noise RMS*		< 35 RMS @35 ms	< 7 RMS @35 ms	< 7 RMS @35 ms	< 2 RMS @35 ms	< 6 RMS @100 ms**
Signal to Noise Ratio		> 250 : 1	> 450 : 1	> 450 : 1	> 1000 : 1	> 15,000 : 1 @100 ms
Optical Resolution		0.25 - 10 nm*	0.25 - 7 nm*	0.25 - 7 nm*	0.3 - 7 nm*	> 3 nm overall
Fiber Optic Connector		SMA905 or FC standard				
PC Interface		Windows XP/VISTA/Win 7, 8.1, 10, 11 (32/64bit) SM32Pro & SMPProMX (free with spectrometer) Includes DLL libraries and SDKs for easy custom application development				

*Depending on the slit and grating choices

**Measured with TEC ON & 10pF CF value