PHOTONTEC
BERLIN

High Sensitivity Spectrometer – Sunshine

Features:

- Up to 80% quantum efficiency
- Customized wavelength range and resolution
- Easy to use

Applications:

- Laser spectral analysis
- Fluorescence spectral analysis
- Raman spectral analysis
- Film thickness measurement
- Reflectivity/transmittance measurement
- Biological cell analysis
- LED analysis

Model	Spectral range
Sunshine General series	GE 200-1100nm
	GE 350-1100nm
	GE-Raman 532-700nm
	GE-Raman 785-1100nm
Sunshine External Triggering series	TG 200-1100nm
	TG-Raman 532-700nm
	TG-Raman 785-1100nm

Wavelength range (nm)	Slit width (µm)					
	5	10	25	50	100	200
	Optical resolution (nm)					
200 – 1100	0.65	0.87	1.09	1.84	3.51	6.61
350 – 1100	0.54	0.73	0.90	1.52	2.92	5.60
300 – 515	0.15	0.20	0.26	0.44	0.83	1.60
400 – 837	0.32	0.42	0.53	0.89	1.70	3.26
532 – 700	0.12	0.16	0.21	0.34	0.66	1.30
785 – 1100	0.23	0.30	0.38	0.64	1.23	2.35

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Detector	
Detector	Hamamatsu S 11510
Wavelength range	200-1100nm
Pixels	2048 pixels
Pixel size	14um*14um
Spectrometer	
Dimensions (mm)	149*109*50
Weight (g)	1000
Optical resolution	0.035-0.6nm
Signal-to-noise ratio	10000:1
Integration time	17ms-10s
Electronics	
Power consumption	450mA@5VDC
Data transfer speed	Full scans into memory every 4 milliseconds with USB 2.0; every 18 milliseconds with USB 1.1
Inputs/outputs	5 inputs and 5 outputs (opto-isolator inputs/outputs)
Analog channels	One 12 analog input one 12 analog output
Strobe functions	Yes
Connector	30-pin connector

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