

SM304

Near-Infrared InGaAs Spectrometer

User Selectable various NIR Range from 0.9 ~ 2.5um

Low Dark Noise and High Stability

Best Performance for NIR Spectroscopy

Wide dynamic range and high signal to noise ratio

Dark Option (Auto Shutter)



The Choice for Low Signal Level NIR Applications

Spectral Products offers the new SM304 TE cooled InGaAs array spectrometers. The SM304 series are ideal for NIR spectrometry that requires very high signal to noise ratio and/or high dynamic rang.

The high performance with low-noise level of the SM304 series makes it possible to apply in very demanding applications. The good sensitivity of the detectors used in the SM304 series allows various broad-band applications like, measuring optical properties of various samples in NIR range, analyzing chemicals/moisture detection, as well as a narrow band applications like NIR laser characterization. Standard interface to the SM304 series is a USB 1.1/2.0 compatible interface with 16-bit.

Software support includes a SDK and DLLs for dedicated applications development and our SM32Pro Windows-based spectral acquisition and analysis software.

Specifications :

Feature	Value				
Models	SM304-512	SM304-512-2.2	SM304-512-2.5	SM304-256-2.1	SM304-256-2.5
Detectors	G9204-512	G9206-512	G9208-512	G9206-256	G9208-256
Pixel Size	25X500 μ m	25X250 μ m		50X500 μ m	
Spectrograph f#	3.3				
Dark	Auto Shutter				
Dark Noise RMS	6RMS @100msec		16RMS @10msec	6RMS @100msec	8RMS @10msec
Signal to Noise Ratio	>15,000:1 @100msec	>10,000:1 @ 100msec			>7,500:1 @ 10msec
Spectral Response Range	0.9-1.7 μ m	0.9-2.2 μ m	0.9-2.5 μ m	0.9-2.05 μ m	0.9-2.5 μ m
Order Sorting Filter	Long pass filter or linear variable filter installed per wavelength coverage				
Optical Resolution	>3nm overall	>5nm overall	>6.5nm overall	>8nm overall	>9nm overall
Stray Light	<0.01% at 632nm (<0.05% Ave)				
Fiber Coupler	SMA905 or FC standard				
Computer interface	USB 1.1/2.0 compatible				
Minimum integration time	1msec				
Trigger Mode	Free Run Mode				
	Software Trigger Mode				
	External trigger mode (9-pin connector) : TTL Edge trigger input/digital output for monitoring				
Dimensions	6.81"X4.72"X2.95" (173mm X 120mm X 75mm)				
Weight	4.5lbs (2.0kg)				
Software	SM32Pro (free with spectrometer)				
	Includes DLL libraries and SDKs for easy custom application development				

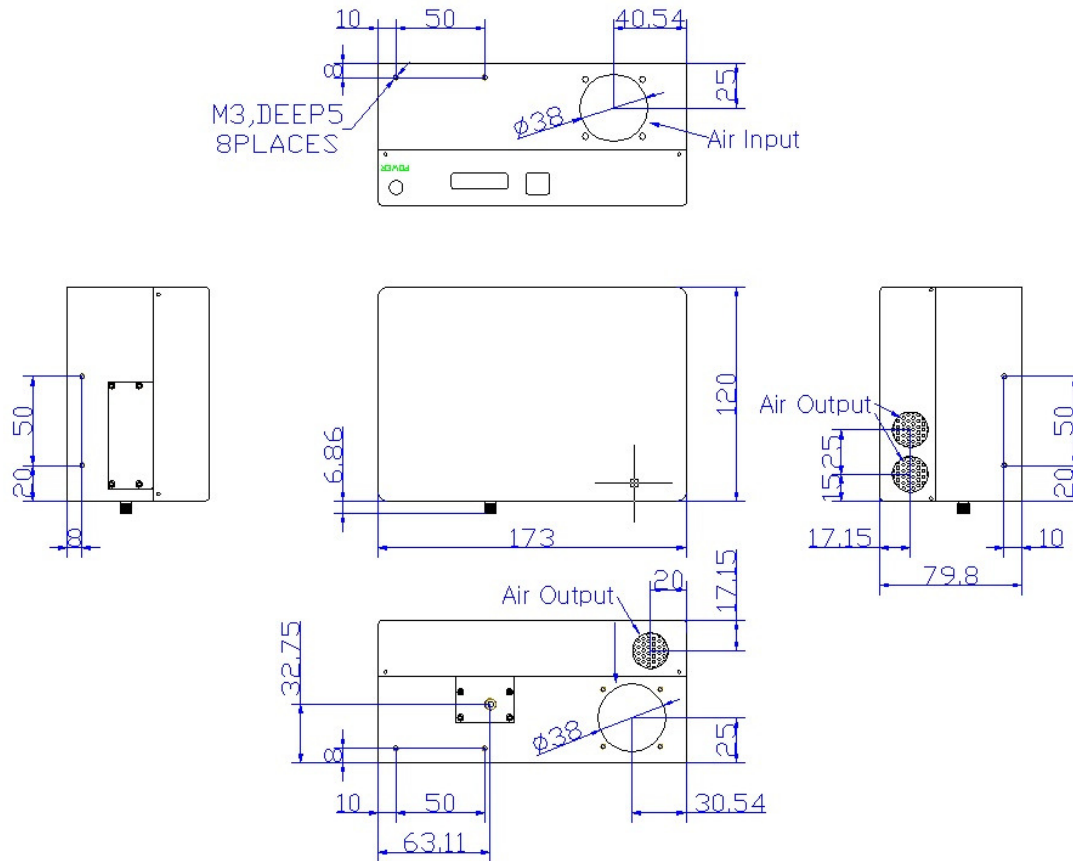
Resolution Chart :

Feature	Value				
Models	SM304-512	SM304-512-2.2	SM304-512-2.5	SM304-256-2.1	SM304-256-2.5
Spectral Response Range	0.9-1.7 μ m	0.9-2.2 μ m	0.9-2.5 μ m	0.9-2.05 μ m	0.9-2.5 μ m
Slit Width (μ m)	Min Optical Resolution (FWHM, nm)				
25	3	5	6		
50	5	10	12	8	9
100	10	15	19	17	20
200	20	30	35	35	40
400	30	40	45	45	50

Note) Estimated



Case Dimension :



(Size in mm)

Ordering Information : Please indicate product number plus description when ordering

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