

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

Dark Option (Auto Shutter)



Physical Dimension

Dimensions	173mm X 120mm X 75mm
Weight	2.0kg
Fiber Optic Connector	SMA905 N.A.=0.22 Optical Fiber Input

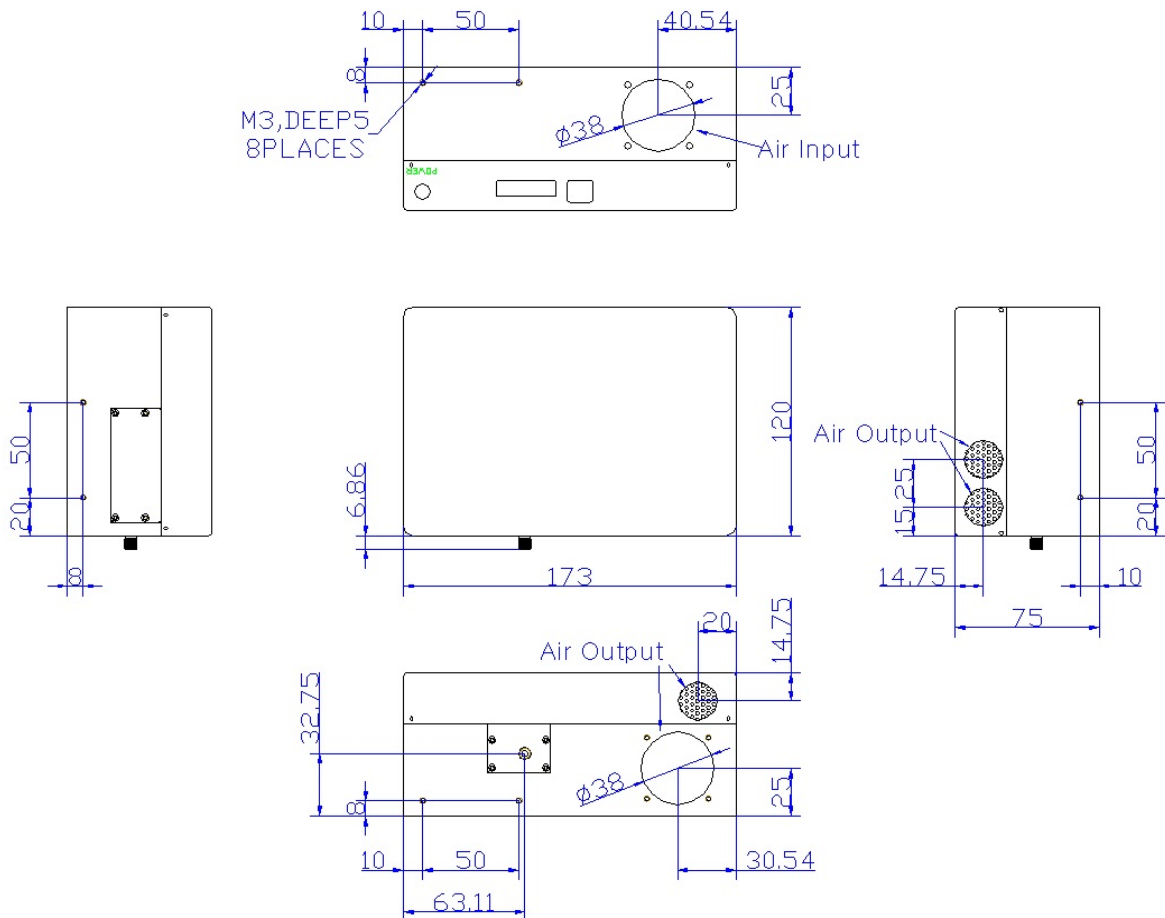
Detector

Detector	SM304-512 : G9204-512
	SM304-512-2.2 : G9206-512
	SM304-512-2.5 : G9208-512
	SM304-256-2.1 : G9206-256
	SM304-256-2.5 : G9208-256
Windows Material	Quartz
Spectral Response Range	SM304-512 : 0.9 ~ 1.7 um
	SM304-512-2.2 : 0.9 ~ 2.2 um
	SM304-512-2.5 : 0.9 ~ 2.5 um
	SM304-256-2.1 : 0.9 ~ 2.05 um
	SM304-256-2.5 : 0.9 ~ 2.5 um
Pixel Size	SM304-512 : 25um x 500um
	SM304-512-2.2/2.5 : 25um x 250 um
	SM304-256-2.1/2.5 : 50um x 500um

Optical Specification

Wavelength Range	User Selectable within spectral response range of each detectos
Optical Resolution	SM304-512 : > 3.5nm overall
	SM304-512-2.2 : > 5nm overall
	SM304-512-2.5 : > 6.5nm overall
	SM304-256-2.1 : > 7nm overall
	SM304-256-2.5 : > 9nm overall
Dark	Auto Shutter
Dark Noise RMS	SM304-512 : 6 RMS @ 100 msec
	SM304-512-2.2 : 6 RMS @ 100 msec
	SM304-512-2.5 : 16 RMS @ 10 msec

Dark Noise RMS	SM304-256-2.1 : 6 RMS @ 100 msec
	SM304-256-2.5 : 8 RMS @ 10 msec
Signal to Noise Ratio	SM304-512 : > 15,000 : 1 @ 100 msec
	SM304-512-2.2/2.5 : > 10,000 : 1 @ 100 msec
	SM304-256-2.1 : > 10,000 : 1 @ 100 msec
	SM304-256-2.5 : > 7,500 : 1 @ 10 msec
Filter	Second Order Blocking Filter Installed
Electrical Specification	
ADC resolution	16bit (0~65535)
Minimum Integration Time	1msec
Interface	USB 1.1/2.0 Compatible
Trigger Mode	Free Run Mode
	Software Trigger Mode
	External Trigger Mode (9-pin connector)
Power Input	100~240V(47~63Hz),1.9A
Computer	
Operating System	Windows XP/VISTA/Win7(32/64bit)/Win8.1(32/64bit)
Software	SM32Pro software included
Software Development Kit	Visual C++ DLL /LabVIEW VI SDK



[Case Dimension]