

SM642

Low Noise Non TE-Cooled Backthinned Spectrometer

Low Cost and High Performance Backthinned CCD Spectrometer

Low Dark Current Noise and Stray Light for Spectrophotometer/ Spectroradiometer

High Signal to Noise Ratio

High Ultra-Violet Quantum Efficiency

High Speed Data Acquisition

Dark Option (Auto Shutter)



Physical Dimension

Dimensions	152mm X 100mm X 63.6mm
Weight	1.2kg
Fiber Optic Connector	SMA905 N.A.=0.22 Optical Fiber Input

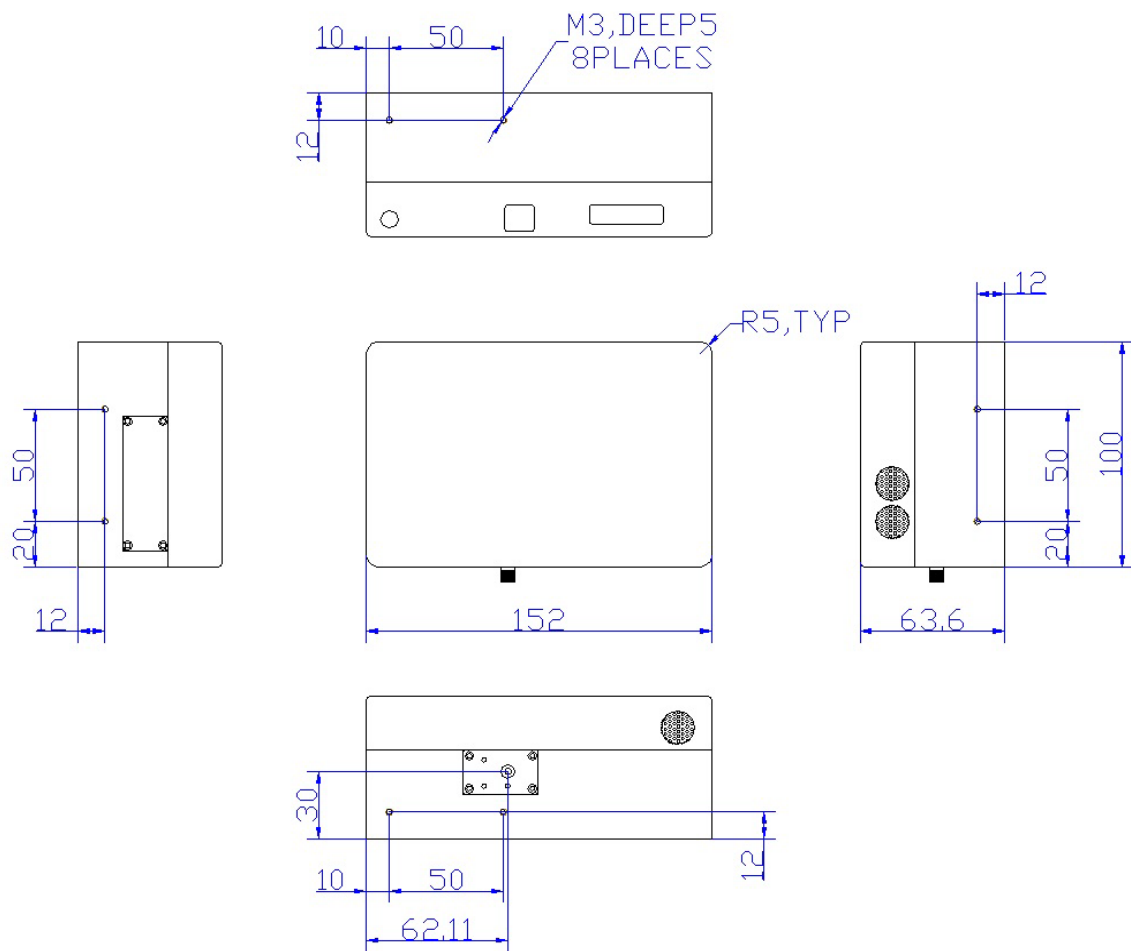
Detector

Detector	Hamamatsu S10420-1106S (Non TE-Cooled Backthinned FFT CCD)
Cooling	None
Windows Material	Quartz
Spectral Response Range	200~1050nm
Pixels	2068 X 70 pixels (Total)
	2048 X 64 pixels (Effective)
Pixel Size	14 um X 14 um
Active Area	28.672 mm X 0.896 mm
Full Well Capacity	200 ke-
Quantun Efficiency	>75% @ 600nm

Optical Specification

Wavelength Range	Full Range : 200~1050nm UV/VIS Range : 200~800nm Visible Range: 300~900nm other user customized range
Optical Resolution	0.25~7nm ,dependent on spectral range slit width, fiber diameter
Dark	Auto Shutter

Dark Noise RMS	< 7 RMS counts in 16bit @ 35msec integration time
Signal to Noise Ratio	450 : 1
Stray Light	<0.05% AVG
Filter	Second Order Blocking Filter Installed
Electrical Specification	
ADC resolution	16bit (0~65535)
Minimum Integration Time	7msec
Interface	USB 1.1/2.0 Compatible
Trigger Mode	Free Run Mode Software Trigger Mode External Trigger Mode (9-pin connector) (TTL Edge Trigger Input / Digital Output for Monitoring)
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]