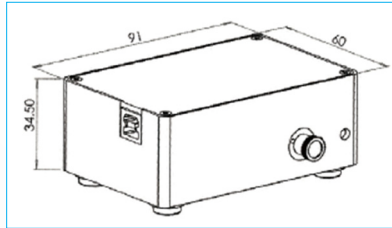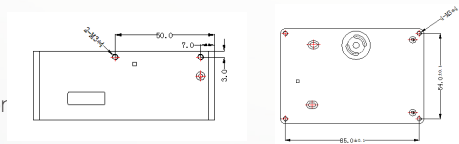# Universal Spectrometer, UV-NIR
BIM-6002 Series

BIM-6002 series spectrometer adopts miniature optical machine platform. It is compact and portable. The resolution is up to 0.35nm-1nm. BIM-6002A series spectrometer has a great upgrade in circuit. The dynamic range is enhanced to 10000:1 and the minimum integration time is reduced to 0.5ms. Meanwhile the signal noise ratio is improved to 600:1. All improvements are more suitable for week signal spectrum measurement. The RS232/RS422 interface is supported, and enhances anti-jamming performance, which is more beneficial for industrial customers.

- Handy and compact, size is as small as a name card
- Crossed czerny-Turner optical design
- Interference filter to eliminate the secondary diffraction spectrum
- Standard SMA905 fiber connector
- Wavelength range and optical resolutions are selectable
- USB 2.0 for data transmission and power supply
- RS232/RS422 interface
- Multiple trigger mode
- Cylindrical lens is selectable
- Auto display peak wavelength and FWHM
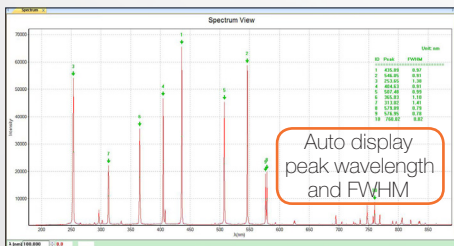- Fixed holes in the bottom and side are for integration

Dimension

Location of the fixing hole

Typical spectrum

Auto display peak wavelength and FWHM

Mercury Lamp Spectrum

Package

* Fiber is optional.

Specifications：

Model No.	BIM-6002	BIM-6002A
Dimensions	91mm x 60mm x 34.5mm	
Weight	0.3 Kg	
Detector spectral response	180nm-1100nm	
Optical system spectral range	700nm, 350nm, 233nm optional	
Optical resolution	0.35nm -1nm	
Fiber connector	SMA905	
Detector	2048 Linear CCD	
Pixel	2048 pixels, size 14μm × 200 μm	
Signal to noise ratio	300:1 at full signal	600:1 at full signal
Linearity	>99%	
Stray light	<0.1% (600nm, 435nm)	
AD resolution	12 bit	16 bit
Integration time	4ms -10s	0.5ms -10s
Dynamic range	5000 :1	10000 :1
Trigger mode	Software, hardware, synchronization	
Power consumption	250 mA, 5 VDC	
Operating temperature	5℃ -35℃（25℃）	
Computer interface	USB2.0, 12Mbps	USB2.0,12Mbps RS232/RS422, 115200bps
Operating system	Win XP, Win7 , Win8, Win10	
Slit	10μm 25μm 50μm (option)	
Fixing hole	4 of M3 fixing hole in the bottom, 2 of M3 fixing hole on side	
Power supply	USB	USB or 5VDC(RS232/RS422)

Order information：

Order No.	Wavelength coverage (nm)	Resolution (nm)	Slit (μm)	Grating (lp/mm)	A/D (bit)	cylindrical lens
BIM-6002A-11	200-1000	~1.5	25	500	16	No
BIM-6002A-01	200-900	~1	25	600	16	No
BIM-6002A-05	350-1050	~1	25	600	16	No
BIM-6002A-13	400-1100	~1	25	600	16	No
BIM-6002A-02	200-550	~0.5	25	1200	16	No
BIM-6002A-14	300-650	~0.5	25	1200	16	No
BIM-6002A-07	500-850	~0.5	25	1200	16	No
BIM-6002A-04	750-1100	~1	50	1200	16	YES
BIM-6002A-08	180-413	~0.35	25	1800	16	No
BIM-6002A-06	260-493	~0.35	25	1800	16	No

Note:

1. Above are our standard models. We can also OEM/ODM according to your requirement. More information about OEM/ODM, please turn to Page 2.

2. *The slit of our standard spectrometer is optional of 25μm, 10μm, 50μm

3. Each spectrometer can be added cylindrical lens(Model No: BC-113005) to detect week signal spectrum.

4. We recommend 16 bits model, if you need 12 bits model, pls contact with us to get it.