

# USB Integrating Sphere Power Meter

## BIM-740xU Series

The BIM-740xU integrating sphere power meter is based on a 2-inch integrating sphere (other sizes customizable) and different detectors such as UV-enhanced silicon (UV-Si), silicon (Si), and indium gallium arsenide (InGaAs) are selected for integration according to wavelength and sensitivity requirements. Its measurable wavelength range spans from 200 nm to 1650 nm.

The BIM-740xU series power meters feature USB communication, eliminating the need for traditional meters by enabling direct connection to a computer for optical power measurement. Additionally, using a USB hub, the system can easily be expanded into a multi-channel optical power acquisition setup, supporting up to 8 channels for synchronized power measurement and display of multiple light sources.



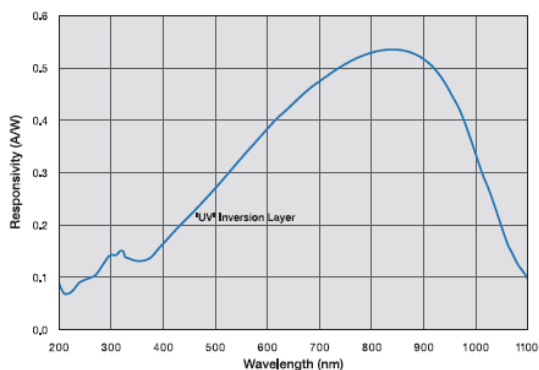
### Features

- Compact and well-structured
- Wide wavelength measurement range
- High precision and fast response
- Support for secondary development
- Supports OEM/ODM customization

### Applications

- Measurement and monitoring of laser power
- Optical power monitoring in semiconductor processing equipment
- Measurement of optical loss in fibers, cables, and various passive optical components
- Detection of various radiation light sources

### Typical Spectrum



Response curve of UV-enhanced Si detector (BIM-7102, BIM-7102U)

Specifications

Model	BIM-7401U-01	BIM-7402U-01	BIM-7403U-01
Detector Material	Si	UV-Si	InGaAs
Wavelength Range	380-1100nm	200-1100nm	800-1650nm
Power Measurement Range	~1W	~100mW	~1W
Maximum Average Power Density	1W/cm <sup>2</sup>	100mW/cm <sup>2</sup>	1W/cm <sup>2</sup>
Integrating Sphere Diameter	2inch		
Integrating Sphere Material	PTFE		
Integrating Sphere Entrance Hole	12mm		
Integrating Sphere Reserved Metering Hole	SMA905 interface		
Integrating Sphere Fixing Hole	M4 / M6		
Calibration Uncertainty	≤ ±5%		
Response Time	≤ 2us		
Interface Type	USB		
Wiring Length	1.5m		
Size	62 x 62 x 85mm		
Weight	0.5Kg		
Working Temperature	5℃ - 50℃ ,		
Relative Humidity	<70% RH		

Dimensions (mm)

