

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.



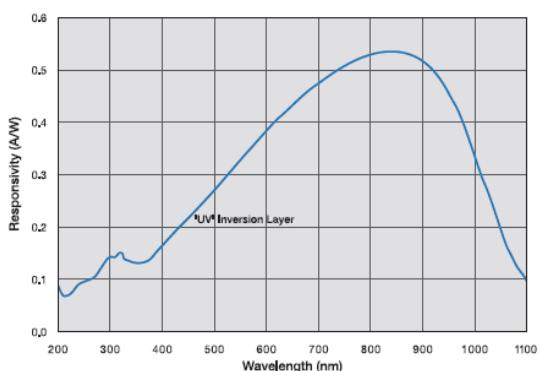
Features

- 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
Optical power meter	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 ²	100mW/cm ²	1W/cm ²
	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%	
Light source	Response Time		≤ 2us	
	Interface Type		USB	
	Wiring Length		1.5m	
	Size		62 x 62 x 85mm	
	Weight		0.5Kg	
LD Driver & TEC Controller	Working Temperature		5°C - 50°C ,	
	Relative Humidity		<70% RH	

Dimensions (mm)

