# USB Photodiode Optical Power Meter

## BIM-710xU Series

The BIM-710xU series USB photodiode optical power meters allow for the selection of detectors such as UV-enhanced silicon, silicon, or indium gallium arsenide (InGaAs) based on wavelength or application requirements. The measurement range covers 200 nm to 1650 nm, and the power measurement range can be expanded by adding OD1/OD2/OD3 attenuators.
This series of optical power meters utilizes USB communication, eliminating the need for additional traditional instruments. By installing the optical power meter software on a computer, users can achieve real-time power data acquisition, analysis, and power monitoring.
Additionally, with a USB hub, the system can be easily configured into a multi-channel optical power acquisition setup, supporting up to 8 channels for simultaneous collection and display of power information from multiple light sources.

Detachable attenuator

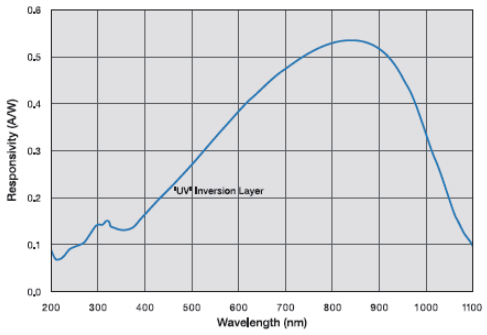
## Features

- Directly communication with computer for data acquisition through USB
- Multi-wavelength measurement with high accuracy, fast response, and wavelength sensitivity
- Integrated calibration data storage function, providing test reports
- Detachable attenuators to extend the measurement range
- Supports free-space optical or fiber-coupled measurements
- Provides SDK for secondary development and 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)

## What's included

| # | Part Description | Qty. |
|---|---|---|
| 1 | USB Photodiode Optical Power meter | 1 |
| 2 | Calibration report (Including QRCode for download of software & manual) | 1 |

## Specifications

| Model | BIM-7101U | BIM-7102U | BIM-7103U |
|---|---|---|---|
| **Detector Material** | Si | Si-UV | InGaAs |
| **Wavelength Range** | 380nm-1100nm | 200nm-1100 nm | 800nm-1650nm |
| **Power Measurement Range** | ~ 10mW | ~ 1mW | ~ 10mW |
| **Max. Aver. Power Density (wthout attenuator)** | 10mW/cm² | 1mW/cm² | 10mW/cm² |
| **Response Time** | ⩽ 2us | ⩽ 2us | ⩽ 0.2us |
| **Effective Detection Diameter** | 1 cm | | 0.3cm |
| **Uncertainty** | ±5% | | |
| **Connecting Cable** | 1.5m | | |
| **Mounting Holes** | 8-32 / M4 | | |
| **Outline Dimension (D/H)** | Φ38mm x30mm | | |
| **Weight** | 105g | | |
| **Operating Temperature** | 5°C -50°C | | |
| **Relative Humidity** | <70% RH | | |

## Dimensions (mm)