

FEATURES

# Optical Power Meter

- Intelligent backlighting and 4 digit LCD display
- Display in W ,dBm or dB
- Digital data communication with photodetectors
- Multi-wavelength measurement
- Data can be easily stored and read-out
- USB integrated
- Built-in power adapter or Rechargeable Battery
- The software supports dual-channel data-acquisition
- and shows the relation of data compared in the same chart



BIM-7001



Photodiode Power Sensor



Thermopile Power Sensor

BIM-7001 is a superior hand-held optical power meter. It is an ideal choice for testing power measurement. It has a large LCD display with intelligent backlight at dark environment and rapid, high-definition display. When connected with PC, the relation of power-time and power-wavelength can be shown in real time on PC, which supports dual input and shows the data in the same chart. And also the data can be saved, imported, exported and analyzed as well. It can be used with a power adapter or a rechargeable battery.

● Specifications

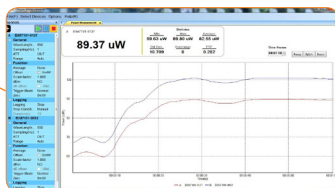
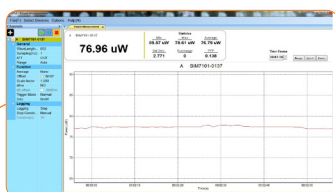
|                         |   |
|-------------------------|---|
| Compatible Detectors    | BIM-71 series (photodiode), BIM-72 series (Thermopile)  |
| Sampling Rate           | 20 Hz   |
| Internal Sample Storage | 800   |
| Communication Interface | USB2.0  |
| Display Type            | 80 x 54mm LCD   |
| Battery Type            | 1.2v Rechargeable Battery (not provided with the meter) |
| Power Requirements      | Input:100 - 240 VAC; Output: 6VDC, 1A;                  |
| Automatic shutdown      | 10 mins   |
| Intelligent Backlight   | Support   |
| Weight                  | 350 g   |
| Dimensions              | 210mm x 120mm x 36mm                                    |

● Ordering Information

| No. | Bill of Material    | Model #  | Qty. |
|-----|---------------------|----------|------|
| 1   | Optical Power Meter | BIM-7001 | 1    |



Support multi channel data acquisition



# Low-Power Digital Photodiode Sensors

FEATURES

- 100% Digital Sensor Technology
- Si-UV, Si and InGaAs , 1pW-10mW range
- Integrated calibration data stored in sensor
- Optional attenuators 10,100 or 1000 times



BIM-71 Series



Brolight uses the high quality photodetectors available in the BIM-71 photodetector series! Available sensor types are silicon (Si), UV-enhanced Si or Indium Gallium Arsenide (InGaAs) to cover 200nm -1650nm wavelength. It integrates the calibration data and optionally provides 10/100/1000 times attenuator for measuring light source from various powers,covering 200nm-1650nm wavelength.

● Specifications

| Model  | BIM-7102                | BIM-7101              | BIM-7103              |
|--|-------------------------|-----------------------|-----------------------|
| Material   | Si-UV                   | Si                    | InGaAs                |
| Spectral Range                                   | 200nm - 1100nm          | 380nm- 1100nm         | 800nm - 1650nm        |
| Power Range                                      | 100 pW - 1 mW           | 100 pW - 10 mW        | 100 pW - 10 mW        |
| (Without Attenuator)                             | -70 dBm - 0 dBm         | -70 dBm - +10 dBm     | -70 dBm - +10 dBm     |
| Max Average Power Density (without Attenuator)   | 1 mW/cm <sup>2</sup>    | 10 mW/cm <sup>2</sup> | 10 mW/cm <sup>2</sup> |
| Max Average Power Density (with 1000 Attenuator) | 1 W/cm <sup>2</sup>     | 10 W/cm <sup>2</sup>  | 10 W/cm <sup>2</sup>  |
| Optional Attenuator                              | 10/100/1000             |                       |                       |
| Active Area                                      | 1 cm <sup>2</sup>       |                       | 0.071cm <sup>2</sup>  |
| Active Diameter                                  | 1.128 cm                |                       | 0.3 cm                |
| Interface Type                                   | DB15                    |                       |                       |
| Connecting line                                  | 1.5 m                   |                       |                       |
| Shape(diameter /high )                           | Cylinder (38 mm /28 mm) |                       |                       |
| Weight   | 105g                    |                       |                       |

● Ordering Information

| No.  | Bill of Material                      | Model #  | Qty. |
|--|---------------------------------------|----------|------|
| 1  | Silicon Photodetector                 | BIM-7101 | 1    |
| 2  | Silicon-UV Enhanced Photodetector     | BIM-7102 | 1    |
| 3  | Indium Gallium Arsenide Photodetector | BIM-7103 | 1    |
| * Remake:match with BIM-7001 optical power meter |                                       |          |      |

# Thermopile Power Sensor

## FEATURES

- Absolute power sensing of laser beams up to 100 W
- Large spectral Response range (UV to MIR)
- 300ms rise time
- EEPROM store Calibration data
- Bluetooth or USB by the wireless module



BIM-7203-0100F

Thermopile power sensor is collectively able to detect 0.19um-15um wavelength and 0.1 Watts to 100 Watts power to meet the most optical power measurement needs. Its active aperture is 26mm and internal EEPROM is for storing calibration data. The user can choose BIM-7001 or Bluetooth /USB data module for collocation use.

Typical applications include measurements of CW Nd: CO<sub>2</sub>, YAG, Holmium lasers, high-power laser diodes and Excimer laser measurements in the UV range.

## Specifications

|                           |  |
|---------------------------|--|
| Model                     | BIM-7203-0100F   |
| Material                  | Thermoelectric   |
| Wavelength Range          | 0.19-15 μm   |
| Power Range               | 0.1-100 W  |
| Max Average Power Density | 1.5 kW/cm <sup>2</sup>   |
| Calibration Uncertainty   | ± 3% @ 1064 nm<br>± 5% @ 190 - 15000 nm  |
| Repeatability             | ± 0.5%   |
| Linearity                 | ± 1%   |
| Uniformity                | ± 1%   |
| Response Time             | 0.3s   |
| Cooling                   | Fan  |
| Connector                 | GX12   |
| Active Diameter           | 26 mm  |
| Dimensions ( L x W x D )  | 70mm x 70mm x 70mm<br>97mm x 70mm x 70mm (work with Bluetooth/usb data module) |



BC-201021

## Bluetooth/usb data module

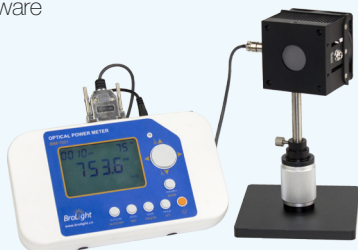
- Analog output 0-5V
- External Trigger
- PWM function, frequency 1Hz-100kHz duty cycle 0.1%-99.9%
- Bluetooth and USB for Remote Operation

## Configuration Schemes

### Thermopile Power Sensor with Optical Power Meter kits

- Intelligent backlighting and 4 digit LCD display
- USB interface, real-time data collection and analysis in Windows system
- multi-channel collection software

Display by BIM-7001



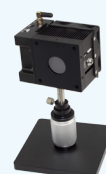
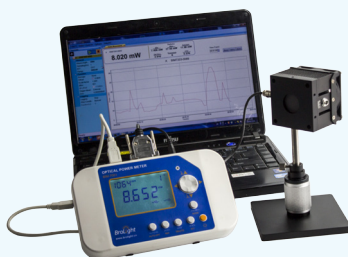
### Thermopile Power Sensor with Bluetooth/usb data module, data acquisition by -PC or iPad/iPhone

- Analog output 0-5V
- External Trigger
- PWM function, frequency 1Hz-100kHz duty cycle 0.1%-99.9%
- Supports windows and ios

Display in the software of windows PC by USB or Bluetooth



Display by the software of Windows PC



Display in ipad/iPhone by the Bluetooth

## Ordering Information

| No. | Bill of Material                         | Model #        | Qty. |
|-----|--|----------------|------|
| 1   | Thermopile sensor, 100W,190nm~15um       | BIM-7203-0100F | 1    |
| 2   | Optical Power Meter                      | BIM-7001       | 1    |
| 3   | Suitcase (option)                        | BC-135015      | 1    |
| 4   | Adjustable height fixing support(option) | BIM-1001       | 1    |

## Ordering Information

| No. | Bill of Material                                 | Model #        | Qty. |
|-----|--|----------------|------|
| 1   | Bluetooth/usb Thermopile sensor, 100W,190nm~15um | BIM-7603-0100F | 1    |
| 2   | Suitcase (option)                                | BC-135015      | 1    |
| 3   | Adjustable height fixing support(option)         | BIM-1001       | 1    |