

# **Technical Specification**

**for**

# **Power Meter Hub**

2012 Ver B

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## 1. Description

The Power Meter Hub is a handy tool and instrument to detect and measure the output power of several different 8 Channel wavelengths at the same time to test the fiber



equipment in the optical network and FTTx construction. The Power Meter Hub is ideal for field or laboratory testing of optical communication system at 850 nm / 1300 nm / 1310 nm / 1550 nm / CWDM 1270 nm ~ 1610 nm ( 20 nm spans ) for all CWDM testing, as well as 1490 nm for FTTx by changing the interchangeable SFP module. The Power Meter Hub features zero warm up and is easy to use with a small size and rugged design.

Internally there is a specifically designed smart circuit included to detect the optical power. By connecting the USB to the PC the real input power figure can easily be read the higher sensitivity figures via USB interface.

## 2. Features

- Small size design
- No warm up time required.
- Receiver designed as SFP Plug-In Module SC connector.
- High sensitivity for measuring 8 CH wavelengths for optical power.
- USB interface and visual input power figures shown in PC.

## 3. Applications

- Maintenance CATV / Telecom / FTTH fiber optical networks.
- Standard laboratory applications.
- Passive component fabrication.
- Optical fiber network traffic monitoring systems.

## 4. Specification

Operating Temp.	<b>0°C ~ 50°C</b>
Storage Temp.	<b>0°C ~ 70°C</b>
Input Wavelength (Multimode)	<b>850 nm / 1300 nm</b>
Input Optical Power Range (Multimode)	<b>-40 dBm ~ +5 dBm</b>
Input Wavelength (Singlemode)	<b>FP 1310 nm / 1550 nm DFB 1310 nm / 1490 nm / 1550 nm CWDM 1270 nm ~ 1610 nm</b>
Input Optical Power Range (Singlemode)	<b>-50 dBm ~ +5 dBm</b>
Resolution	<b>0.01 dB</b>
Accuracy	<b>±0.3dB under calibrated condition</b>
Display	<b>By software</b>
Power Supply	<b>5 Volt DC Power</b>
Dimension	<b>168 * 108 * 36 mm</b>
Weight	<b>0.38 Kg</b>

P/N: S20063221	Min.	Typ.	Max.	Unit	Note
Power Range	-40		+5	dBm	@ 25°C 62.5 / 125 μm fiber

Calibration Wavelengths : 850nm , 1300nm

P/N: S20063122	Min.	Typ.	Max.	Unit	Note
Power Range	-50		+5	dBm	@ 25°C 9 / 125 μm fiber

Calibration Wavelengths : 1310nm , 1490nm , 1550nm

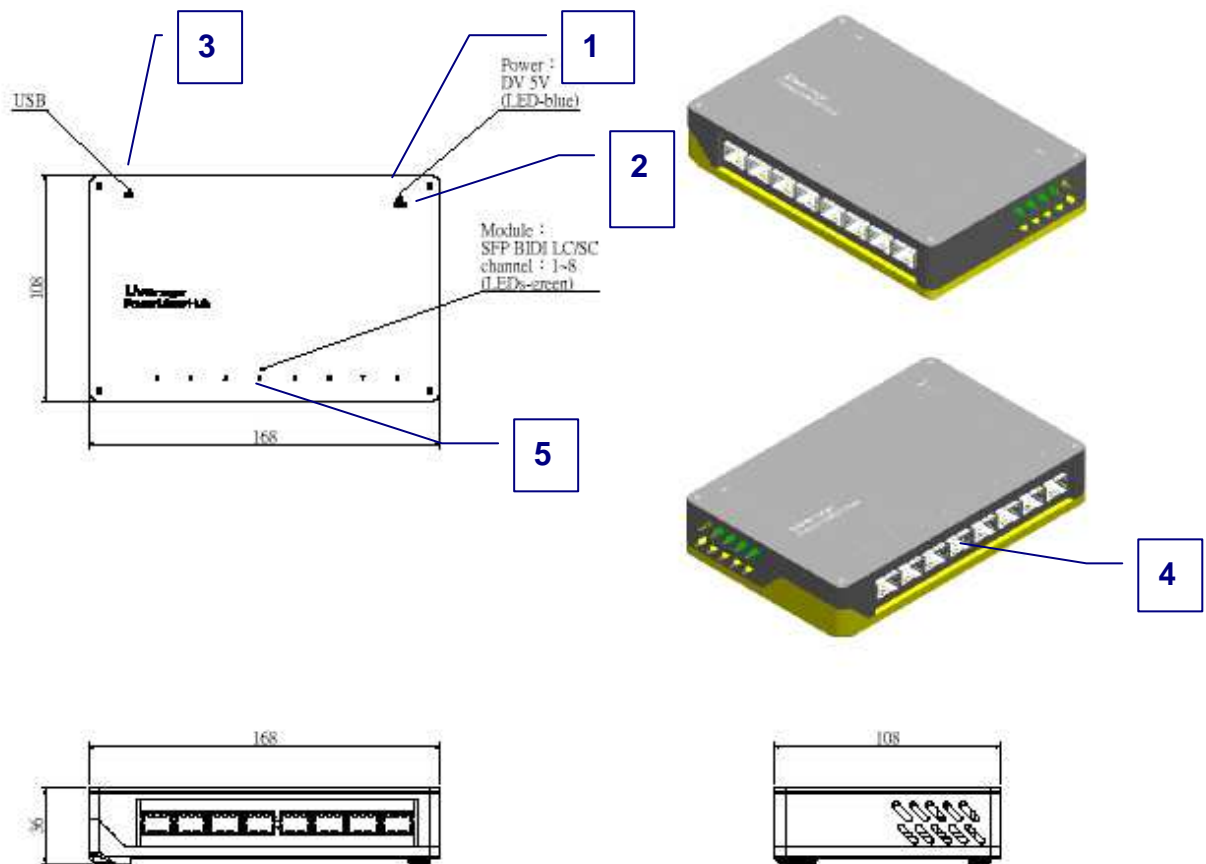
P/N: S20063123	Min.	Typ.	Max.	Unit	Note
Power Range	-50		+5	dBm	@ 25°C 9 / 125 μm fiber

Calibration Wavelengths : 1270nm , 1290nm , 1310nm , 1330nm, 1350nm, 1370nm,  
1390nm, 1410nm, 1430nm, 1450nm

P/N: S20063124	Min.	Typ.	Max.	Unit	Note
Power Range	-50		+5	dBm	@ 25°C 9 / 125 μm fiber

Calibration Wavelengths : 1470nm , 1490nm , 1510nm , 1530nm, 1550nm,  
1570nm, 1590nm, 1610nm

## 5. Elements & Operating Instructions



■ **Elements:**

1. **DC Power Connector** : provide DC 5V Power Supply.
2. **DC Power LED indicator** : : In Operation indicator is shown BLUE.
3. **USB interface** : To connect the optical power data to you PC.
4. **SFP Pug-In Cage** : hot pluggable to plug into SFP Plug-In receiver .
5. **SFP Plug-In LED Indicator**: In Operation indicator is shown GREEN.

■ **Operating Instructions:**

1. The Power Meter Hub is powered by 5 VDC.
2. To initiate the Power Meter Hub plug-in the 5.0VDC power supply and check if the LED indicator is BLUE.
3. Connect the Power Meter Hub to the PC by connecting the USB interface.
4. Plug in the SFP Power Meter Module and the LED indicator is now GREEN while the Power Meter is in operation.
5. Execute the Power Meter Software file in your Windows system.
6. Adjust the Wavelength in the program.
7. Read the input Optical Power and record it.
8. Do not touch the Power Meter Hub connector in order to avoid dirt getting into the connector.
9. Use proper tools to clean the Power Meter Hub SFP connector before testing. This will ensure longer instrument life and the best test results.

## **6. Maintenance**

Like any other type of electronic equipment, this Power Meter Hub should be kept away from water, high humidity, dust, electricity, and environments of extreme temperatures. Do not drop this tool on any hard surface. Internal modification of any of the Power Meter Hub components can cause a malfunction and will invalidate the manufacturer's warranty.

## **7. Warranty**

The manufacturer warrants this product to be free of defects in workmanship and materials for a period of 1 year after purchase. This warranty (excluding batteries) is solely limited to the repair or replacement of the original parts. All other costs are the sole responsibility of the owner. This warranty does not cover any defects, damage, or deterioration due to misuse, alteration, or negligence.

## 8. Ordering Information:

Part Number	Media	Receiver Wavelength	Remark
S20063009999	NONE	NONE	8 Ports Main Frame
S20063221	MM	850 / 1300 nm	SC Receptacle
S20063122	SM	1310 / 1490 / 1550 nm	SC Receptacle
S20063123	SM	CWDM 1270 nm ~ 1450 nm	SC Receptacle
S20063124	SM	CWDM 1470 nm ~ 1610 nm	SC Receptacle
S20063125	SM	1270 / 1310 / 1490 / 1550 / 1625nm	SC Receptacle

## 9. Service Contacts

Please contact us :

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