Ascentac
Optical Power Meter
Ascentac OPM120

High Accuracy, Maximum Dynamic Range of 76 dB & High Power Measurement Capability

Ascentac OPM120 Series, Optical Power Meter, provides high accuracy for optical power measurement in fiber-optic network. It has a wide dynamic range from +6 to -70dBm or +26 to -50dBm. Offering seven calibrated wavelengths (85onm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm & 1650nm) makes it ideal for both single-mode and multi-mode fiber testing. Furthermore, its wavelength can be automatically selected when it is paired with Ascentac Optical Light source (OLS200). Technicians are not required to manually set up the calibration parameter. It speeds up the test and eliminates possible failures of setting.

Ascentac OPM120 Series also has the capacity to analyze the cable status. ''Low Power'' alarm reads on screen when the measured value is lower than the threshold users set up. Test results can be stored up to 1000 records and easily transferred to PC via USB connection.

Its interchangeable connectors (SC, FC, LC, Universal 2.5mm&1.25mm) are dust-and-drop protected. All other common features like relative measurements and auto-shutdown are included.

Benefits

- 7 calibration wavelengths

- Automatic wavelength recognition for time saving and error-free (Must use with Ascentac OLS200)

- Analysis of cable status e.g. Low Power (Displayed on screen) (Threshold can be set up)

- Document results and generate reports to PC via USB connection

- Generous data storage up to 1000 records

- Auto shutdown & backlight sleep mode for extending the battery life (Programmable)

- Option: Function of Visual Fault Locator with CW (Continuous Wavelength) or modulated tones at 1Hz or 2Hz

Application

- Optical power or loss measurement in telecom or CATV installation and maintenance

Description

1. 2.4 inch ultra-bright TFT color LCD with backlight function (Comfortable and easy to read display for darker operation)

2. Pass/fail results with LED indicator (User-settable thresholds)

3. Hole to attach strap for hands-free

4. Interchangeable adapters for superior flexibility
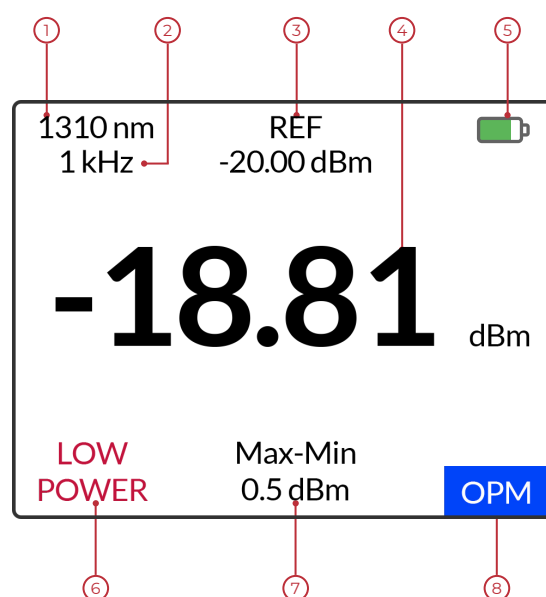
   SC   LC   FC   Ø 1.25   Ø 2.5

   Removable adapters for easy cleaning

5. Dust cap for protecting optical interface plus as a stand for hands-free

6. Intuitive interface for easy use

7. 4 AAA-size dry batteries (Easily obtained) or rechargeable batteries charged by USB (Reduce the operational cost)
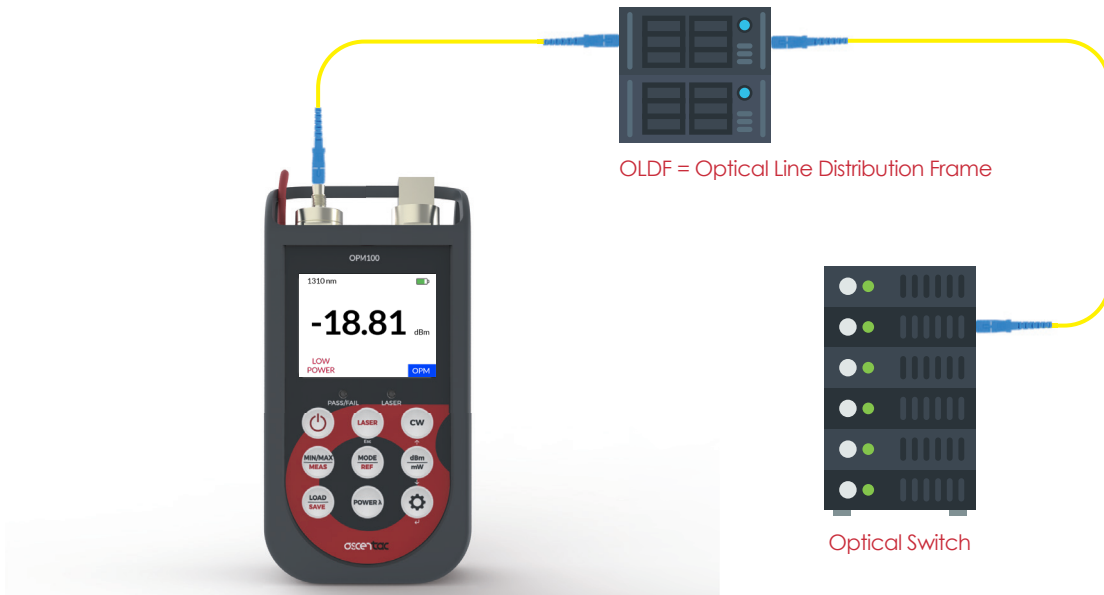
Measurement Display

1. Wavelength (850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, 1650nm)

2. Detected signal (CW, 270Hz, 1kHz, 2kHz)

3. Reference power

4. Power measurements in dBm or mW

5. Battery status (Low battery indicator) to remind users of replacing batteries

6. Alarm indicator

7. Total loss measurement

8. Function mode (OPM & VFL)

When to Use OPM120

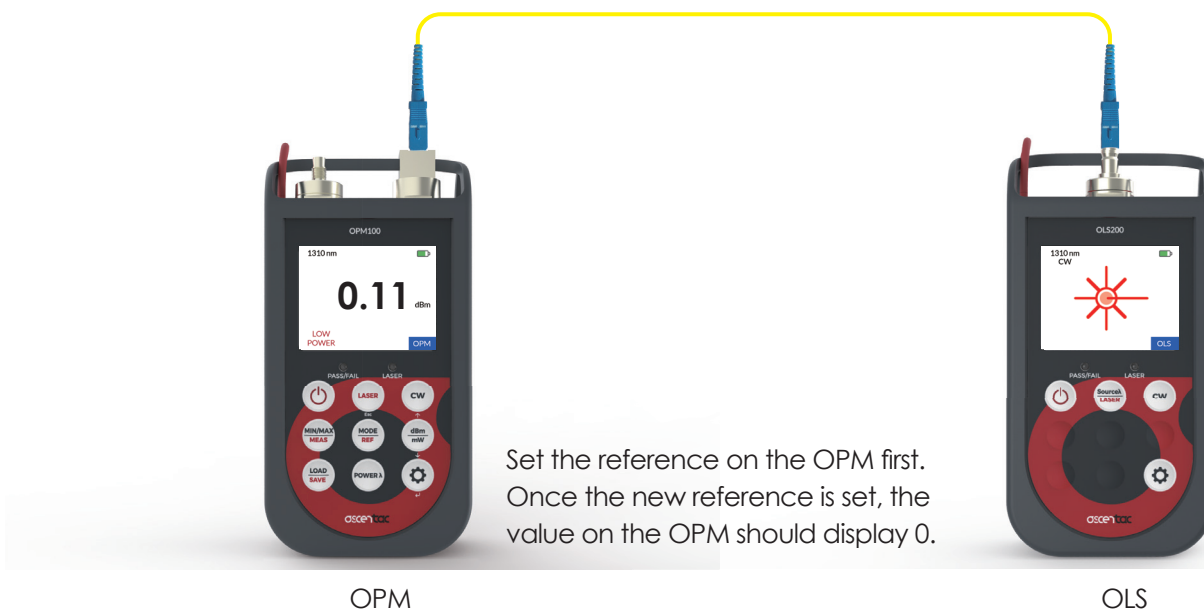**1. Optical Power Measurement**
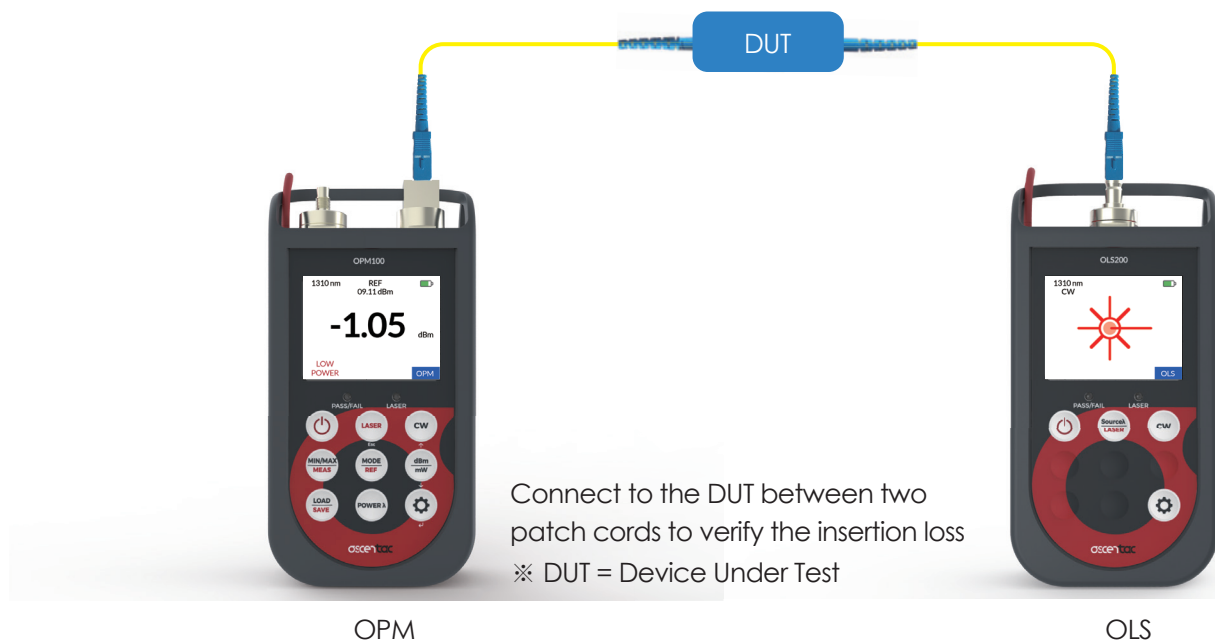
Connect one end of the patch cord to the adapter cap and the other end to the optical output to be measured

OLDF = Optical Line Distribution Frame
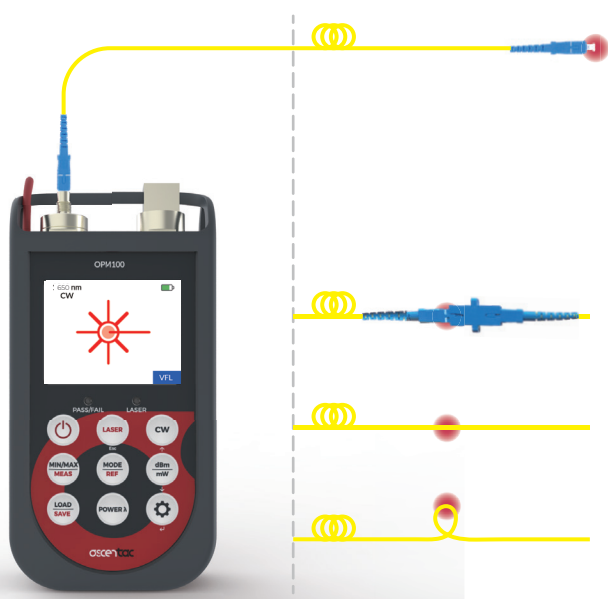
Optical Switch

2. Optical Loss Measurement

Performing with OLS to measure optical power to calculate optical loss

Set the reference on the OPM first. Once the new reference is set, the value on the OPM should display 0.

OPM

OLS

Connect to the DUT between two patch cords to verify the insertion loss

※ DUT = Device Under Test

OPM

OLS

When to Use Built-in VFL in OPM120

1. Fiber identification & End-to-end continuity tests

2. Troubleshooting

Red illumination indicating fiber damages, bends or breaks

• Fiber connector not properly attached

• Broken fibers inside

• Bending

Specification

OPM Specification		
Power Range (dBm)	+26 to -50	+6 to -70
Detector	InGaAs	
Uncertainty (dB)	≤ ±5 % or ≤ ±0.25 dB (@-10dBm or -20dBm)	
Linearity (dB)	≤ ± 0.1	
Resolution (dB)	0.01	
Calibrated Wavelength(nm)	850, 1300, 1310, 1490, 1550, 1625, 1650	
Optical Connector	Interchangeable FC / SC / LC / Universal 2.5mm / Universal 1.25mm adapter (Option)	

VFL Specification (Option)	
Wavelength (nm)	650±10 (Visible)
Output Power (mW)	1, 10, 30 or 50 (Option)
Modulation Output	CW(Continuous Wavelength), 1Hz, 2Hz
Distance (km)	> 5
Optical Connector	Universal 2.5mm

Memory	
Record Storage	1000 results
Data Output	USB interface

Display	
2.4 inch ultra-bright TFT color LCD with backlight function	

Power Supply	
Dry batteries or rechargeable NiMH batteries (Charged by USB connection): AAA-size x 4	
Battery Life (hours) (with backlight-LOW) (OPM mode)	> 25

Environment	
Working Temperature (°C)	-10 to +60
Storage Temperature (°C)	-30 to +70
Relative Humidity (%)	5 to 95, Non-condensing

Dimensions and Weight	
Size (H x W x D) (mm)	150 x 75 x 30
Weight (g) (batteries included)	Approximately 250

Standard Accessories	
Main unit, AAA battery 4pcs, Carrying bag, Shoulder strap, One-year warranty	

Ordering Information

OPM 01-0012 X + A0-001 XX

Power Range
1 : +6dBm to -70dBm
2 : +26dBm to -50dBm

Adapter
01 : Interchangeable FC adapter
02 : Interchangeable SC adapte
03 : Interchangeable LC adapter
04 : Interchangeable universal 2.5mm adapter
05 : Interchangeable universal 1.25mm adapter

Option

Visual Function Locator (VFL)

A1-01104	1mW, Built-in Universal 2.5mm Tip Sleeve
A1-01204	10mW, Built-in Universal 2.5mm Tip Sleeve
A1-01304	30mW, Built-in Universal 2.5mm Tip Sleeve
A1-01404	50mW, Built-in Universal 2.5mm Tip Sleeve

Adaptor for OPM

A0-00101	Interchangeable FC Adapter
A0-00102	Interchangeable SC Adapter
A0-00103	Interchangeable LC Adapter
A0-00104	Interchangeable Universal 2.5mm Adapter
A0-00105	Interchangeable Universal 1.25mm Adapter

USB Power Adapter

A0-00201	USB Power Adapter, US Plug
A0-00202	USB Power Adapter, EU Plug
A0-00203	USB Power Adapter, UK Plug
A0-00204	USB Power Adapter, AU Plug

USB Cable

A0-00301	Micro USB to USB-A

Fiber-optic Patch Cord

A0-00601	Single Mode 9/125--SC/UPC to SC/UPC--2m
A0-00602	Single Mode 9/125--SC/UPC to LC/UPC--2m
A0-00603	Single Mode 9/125--SC/UPC to ST/UPC--2m
A0-00604	Single Mode 9/125--SC/APC to SC/UPC--2m
A0-00605	Single Mode 9/125--SC/APC to LC/UPC--2m
A0-00606	Single Mode 9/125--SC/APC to SC/APC--2m
A0-00607	Single Mode 9/125--FC/UPC to FC/UPC--2m

Adapter Cleaning Sticks - 100 pcs/box

02-0A110	1.25mm without ESD (Electro-Static Discharge)
02-0A120	2.5mm without ESD (Electro-Static Discharge)
02-0B110	1.25mm with ESD (Electro-Static Discharge)
02-0B120	2.5mm with ESD (Electro-Static Discharge)

Fiber Cleaner - 400 wipes/pc

02-0A401	Fiber Cleaner--1 slot
02-0A402	Fiber Cleaner--2 slots
02-0B401	Cartridge--1 slot
02-0B402	Cartridge--2 slots

Replacement Parts

A0-00001	Battery Cover Cap

Example：OPM 01-00121 + A0-00101
Option: A1-01104, A0-00102, A0-00201, A0-00301

For the latest information regarding this product, please visit our website at http://www.ascentac.com

Made In Taiwan

Contact us