![ascentac logo]

OMM300
Optical Multi Meter

User Guide _ Version 1.0

Copyright

Disclaimer

Warranty

Ascentac warrants the product against defects in material and workmanship within (1) year from the date of delivery. Under normal use and service, the product will be free from physical defects in material and workmanship during the warranty period, or the product will be repaired or replaced as determined solely by Ascentac.

During the warranty period, you and Ascentac will pay the shipping costs for repairing products for one time respectively. Products returned without proof of purchase or with warranty expired will be repaired or replaced by Ascentac's decision. You shall pay the charges, including maintenance cost, shipping, insurance, duties, taxes, import fees or others which may be caused.

This warranty provides you with specific legal rights. You may have additional rights which may vary from state to state and country to country. Because of individual state and country regulations, some of the above limitations and exclusions may not apply to you.

If any of the following conditions take place, the warranty shall be null and void.
● Defects or malfunction caused by human factors, accident, improper use not conforming to product manual instructions, abuse or unauthorized alteration, modification or repair of the product.
● The label with S/N has been altered or damaged.

Notice: Ascentac makes no warranty of any kind with regard to the content in this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Service & Support

If you have any questions or need any assistance, please contact our service center.

TEL: +886-7-398-1000
FAX: +886-7-398-3965
Address: 9F.-6, No. 12, Fuxing 4th Rd., Qianzhen Dist., Kaohsiung City 806611, Taiwan (R.O.C.)

Please prepare the following information before you contact us and describe the problems.
- Product model and S/N
- Warranty information

Content

1. Safety Information

Read all safety information carefully before using this product to ensure personal safety and proper use.

- Assure the power supply conforming to the specification of this product and qualified for the country of use.
- Use batteries that meet the specifications of this product.
- Do not use damaged power cords, accessories or other peripheral equipment.
- Make sure the product is operated on the permitted ambient conditions.
- Never directly look into the optical outputs interface.
- Dangerous laser radiation:

2. Introduction

Ascentac OMM380 Series, Optical Multi Meter, combines optical light source (OLS), optical power meter (OPM) and visual fault locator (VFL) Laser Diode in one handheld unit which can conveniently perform optical power & link loss measurement and troubleshooting of fiber-optic network. It is a perfect instrument for both multi-mode and single-mode fibers.

Ascentac OMM380 Series can accommodate up to 1000 results and transfer data to PC via USB connection. It is battery-operated by either dry batteries or rechargeable batteries (4 AAA-size).

2.1 Feature

- Three functions in one unit (OLS, OPM & VFL)

- Document results and generate reports to PC via USB connection

- Memory capacity of 1000 results

- Measurement Units: dB or dBm

2.2 Application

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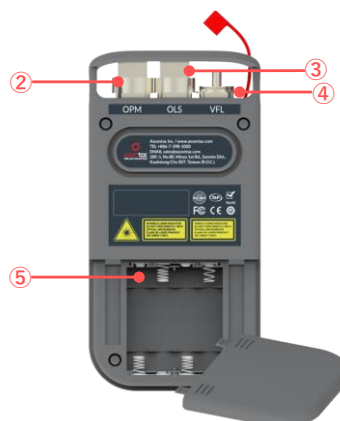
3. Layout

3.1 Appearance

- Front

- Side

- Back

3.2 Instruction

Button	Function	Description
⏻	Power on/off	Long press for two seconds to turn on/off the meter.
λ SELECT	Wavelength selection	Short press to switch wavelength.
LASER ON/OFF	Laser on/off	Long press for two seconds to turn on/off the laser.
MODE	Mode switching	Short press to switch mode. OPM → OLS
dBm/mW	Measurement unit selection	Short press to switch measurement unit or cancel reference value.
⊓⊓ **CW**	Modulation output	Short press to switch modulation output. OLS: CW → 270Hz → 1kHz → 2kHz VFL: CW → 1Hz → 2Hz
SAVE LOAD	Data saving and loading	Short press to save the measured value. Long press for two seconds to load the value.
REF	REF setting	Press to set the reference value.
⚙	Setting	Short press to access device setting.

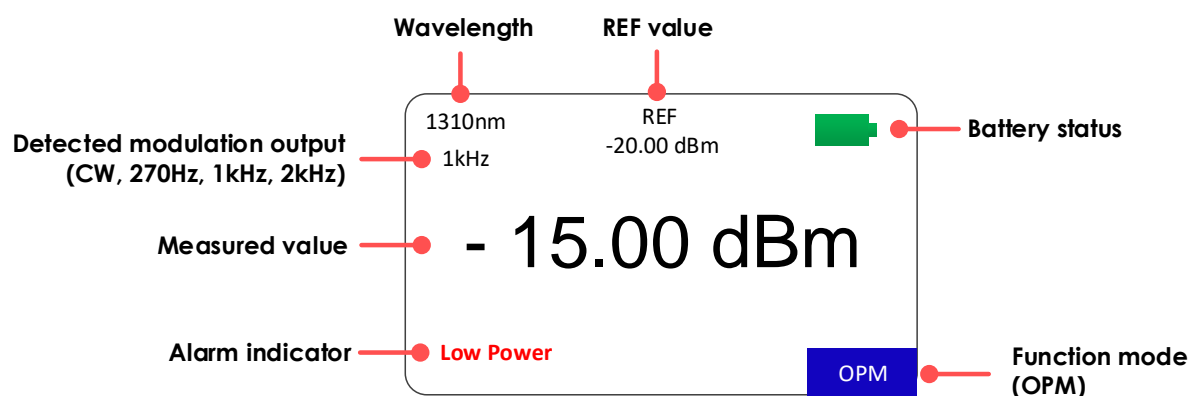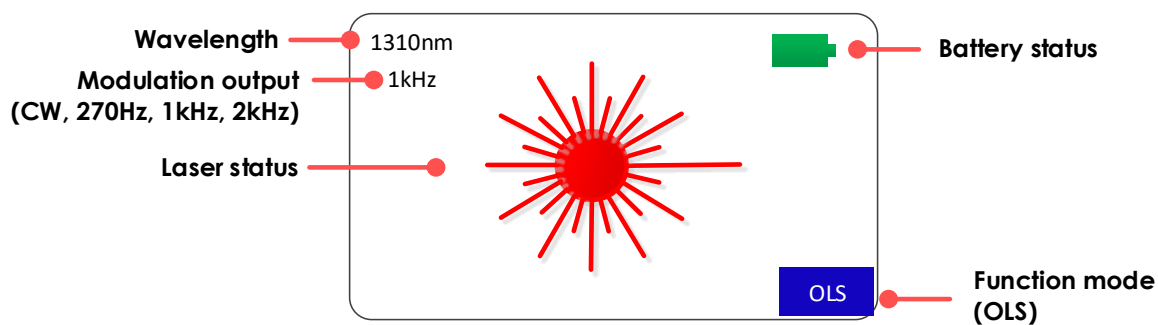| Item	Function	Description
1	USB	1. Power supply 2. Charge rechargeable batteries 3. Transfer measured record to PC
2	OPM optical connector	SC, FC or Universal 2.5mm
3	OLS optical connector	SC, FC or Universal 2.5mm
4	VFL optical connector	Universal 2.5mm
5	Battery	Dry batteries or rechargeable batteries (Charged by USB connection): AAA-size x 4

3.3 LED Indicator

Item	LED Indicator	LED Status	Description
1	PASS/FAIL	Off	Without setting threshold
		Red	Setting threshold 1. Measured value of optical power is less than low power threshold. 2. With setting REF value, the loss value is higher than loss threshold.
		Green	Setting threshold 1. Measured value of optical power is equal to or higher than low power threshold. 2. With setting REF value, the loss value is equal to or less than loss threshold.
2	LASER	Off	No emitting light
		Red	Emitting light

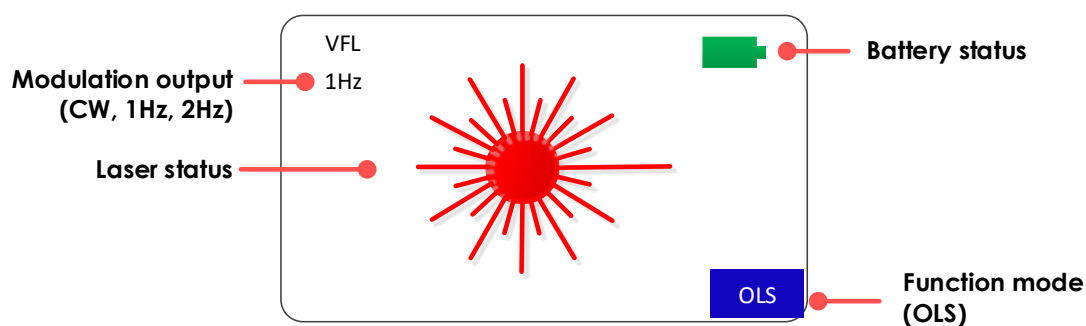# 4. Display

4.1 Optical Power Meter (OPM)

Wavelength

REF value

Detected modulation output
(CW, 270Hz, 1kHz, 2kHz)

1310nm
1kHz

REF
-20.00 dBm

Battery status

Measured value

- 15.00 dBm

Alarm indicator

Low Power

OPM

Function mode
(OPM)

4.2 Optical Light Source (OLS)

Wavelength — 1310nm

Modulation output
(CW, 270Hz, 1kHz, 2kHz) — 1kHz

Laser status

Battery status

OLS

Function mode
(OLS)

4.3 Visual Fault Locator (VFL) (Option)

VFL

Modulation output
(CW, 1Hz, 2Hz) — 1Hz

Laser status

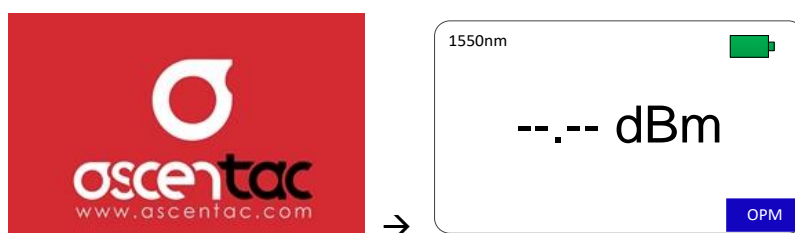Battery status

OLS

Function mode
(OLS)

5. Operation

5.1 Power-on

Press [⏻] key for two seconds to turn on the meter.

Startup screen → Enter into optical power measurement interface.

Note

"--.-- dBm" is displayed when there is no input of optical light source.

5.2 Power-off

Press [⏻] key for two seconds to turn off the meter.

5.3 Optical Power Measurement

■ Short press [**MODE**] key to switch to OPM mode.

■ WT305 series can automatically recognize the wavelength if the modulation output of optical light source is 2kHz from Ascentac OLS200 or OLM300 Series.

■ Set low power threshold in Device Setting. **"Low Power"** will be displayed if the measured value of optical power is less than low power threshold. The Pass/Fail LED indicator on the device will be red.

■ Short press [**dBm/mW**] key to switch measurement unit.

■ Press [**REF**] key to set the reference value and press [**dBm/mW**] key to cancel the reference setting.

■ Short press [**SAVE/LOAD**] key to save the measured value; long press [**SAVE/LOAD**] key for two seconds to load the saved value.

Note

[**LASER ON/OFF**] and [**CW**] key are not available in OLS mode.

5.4 Optical Light Source

- Short press [**MODE**] key to switch to OLS mode.

- Short press [**λ SELECT**] key to select wavelength.

- Short press [⎍ CW] key to select modulation output.

- Long press [**LASER ON/OFF**] key for two seconds to turn on laser.

- Long press [**LASER ON/OFF**] key for two seconds to turn off laser.

Note

[**SAVE/LOAD**], [**dBm/mW**] and [**REF**] key are not available in OLS mode.

5.5 Device Setting

Short press [⚙] key to access device setting.