

# Ascentac

## Optical Loss Meter

Ascentac OLM300



### OLS, OPM & VFL in One Unit and Innovative Macro-bending Detection

Ascentac OLM300 Series, Optical Loss Meter, combines optical light source (OLS), optical power meter (OPM) and visual fault locator (VFL) 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 bi-directional testing for both multi-mode and single-mode fibers.

Ascentac OLM300 Series characterizes remote wavelength-switching and enables technicians to read remote measurement values. The fairly better feature is to analyze cable status like macro-bending or low power and notify technicians of the condition on screen.

Ascentac OLM300 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).

### Benefits

- Auto-wavelength recognition and remote wavelength-switching
- Automatically bidirectional loss test
- Readable remote measurement values
- Analysis of cable status e.g. Bending (Displayed on screen)
- Document results and generate reports to PC via USB connection
- Memory capacity of 1000 results
- Auto shutdown & backlight sleep mode (Programmable) (Extend the battery life)

### Application

- Optical loss measurement

## 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 (OPM interface)
 

SC



LC



FC



Ø 1.25



Ø 2.5

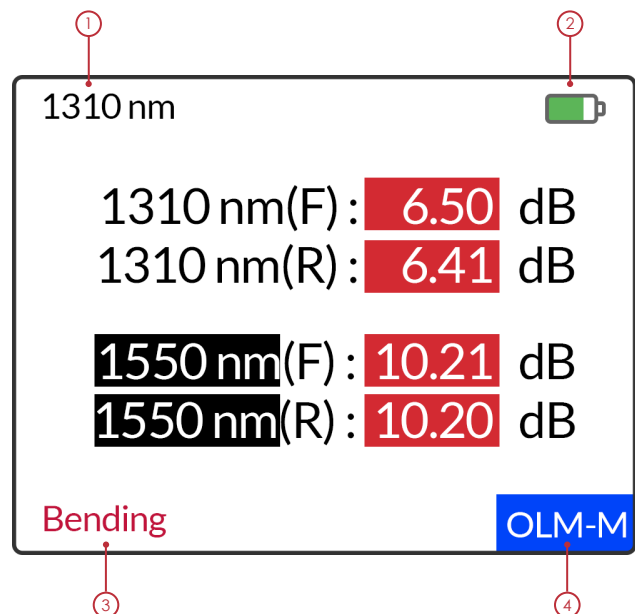


Removable adapters for easy cleaning
- ⑤ Dust cap for protecting optical interface plus as a stand for hands-free
- ⑥ Menu-oriented operation for easy use
- ⑦ 4 AAA-size dry batteries (Easily obtained) or rechargeable batteries charged by USB (Reduce the operational cost)



## Measurement Display

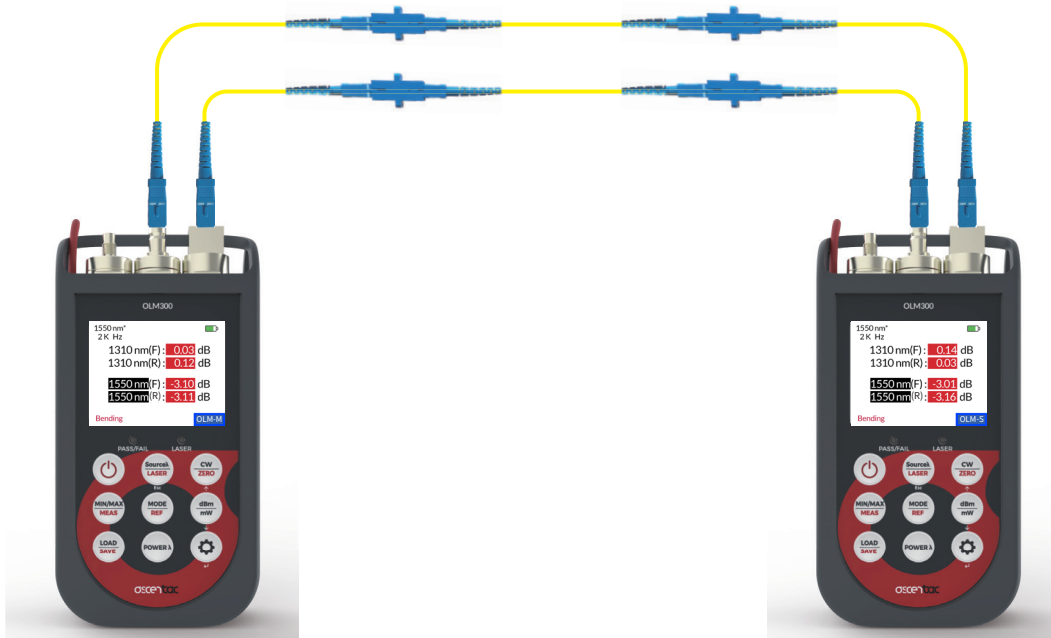
- ① Wavelength
- ② Battery status (Low battery indicator to remind users of replacing batteries)
- ③ Alarm indicator
- ④ Function mode
  - OPM: Optical Power Meter
  - OLS: Optical Light Source
  - OLM-M: Optical Loss Meter - Master
  - OLM-S: Optical Loss Meter - Slave



## When to Use OLM300

Optical Loss Measurement

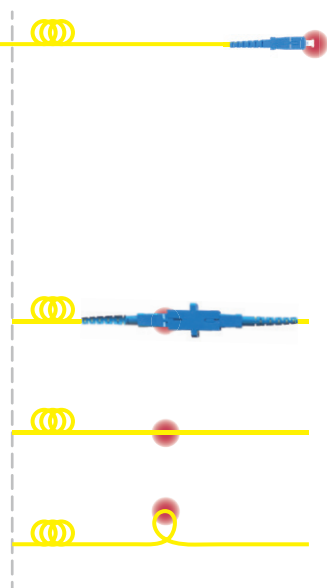
Bi-directional testing in the A-B & D-C direction



Master

Slave

## When to Use Built-in VFL in OLM300



**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)	Two ports (Note 1): +6 to -70 or +26 to -50 One port (Note 2): +9 to -65 or +26 to -45
Detector	InGaAs
Uncertainty (dB)	≤ ±5 % or ≤ ±0.25 dB (@-10dBm or -20dBm)
Linearity (dB)	≤ ± 0.1
Resolution (dB)	≤ ± 0.01
Wavelength Range (nm)	850, 1300, 1310, 1490, 1550, 1625, 1650
Optical Connector	Two ports (Note 1): Interchangeable FC / SC / LC / Universal 2.5mm / Universal 1.25mm adapter (Option) One port (Note 2): Built-in universal 2.5mm tip sleeve Option: 2.5mm universal connector male to FC / SC / LC female adapter

OLS Specification						
Central Wavelength (nm)	850 (±30)	1300 (±50)	1310 (±20)	1490 (±20)	1550 (±20)	1625 (±5)
Spectral Width (nm)	≤ 5					
Output Power (dBm)	Two ports (Note 1): ≥ -4 One port (Note 2): ≥ -7					
Stability (dB)	± 0.05 (15 mins, short term)					
	± 0.2 (8 hours, long term)					
Modulation Output	CW(Continuous Wavelength), 270Hz, 1kHz, 2kHz					
Optical Connector	Both two ports (Note 1) & One port (Note 2) Built-in universal 2.5mm tip sleeve Option: 2.5mm universal connector male to FC / SC / LC female adapter					

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

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

**Power Supply**  
1. Dry batteries or rechargeable NiMH batteries (Charged by USB connection): AAA-size x 4  
2. AC Input: 100-240VAC / 50-60 Hz

Battery Life (hours) (with backlight-LOW) (OPM mode)	> 25
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Environment	
Working Temperature (°C)	-10 to +60
Storage Temperature (°C)	-30 to +70
Relative Humidity (%)	5 to 95, Non-condensing

Memory	
Record Storage	1000 results
Data Output	USB interface

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

Certification	
	

Note : 1. Two ports: One port for OLS & one port for OPM  
2. One port: OLS & OPM combined in one port

## Ordering Information

OLM 01-0 X 3 XX + A0-001 XX

### Model

A : Two ports, one port for OLS & one port for OPM  
B : One port, OLS & OPM combined in one port

### OLS Central Wavelength & OPM Power Range

01 to 07 & 41 to 47 are available for Model A  
21 to 27 & 61 to 67 are available for Model B

01: 850nm & 1300nm, +6dBm to -70dBm  
02: 1310nm & 1490nm, +6dBm to -70dBm  
03: 1310nm & 1550nm, +6dBm to -70dBm  
04: 1310nm & 1625nm, +6dBm to -70dBm  
05: 1490nm & 1550nm, +6dBm to -70dBm  
06: 1490nm & 1625nm, +6dBm to -70dBm  
07: 1550nm & 1625nm, +6dBm to -70dBm

21: 850nm & 1300nm, +9dBm to -65dBm  
22: 1310nm & 1490nm, +9dBm to -65dBm  
23: 1310nm & 1550nm, +9dBm to -65dBm  
24: 1310nm & 1625nm, +9dBm to -65dBm  
25: 1490nm & 1550nm, +9dBm to -65dBm  
26: 1490nm & 1625nm, +9dBm to -65dBm  
27: 1550nm & 1625nm, +9dBm to -65dBm

41: 850nm & 1300nm, +26dBm to -50dBm  
42: 1310nm & 1490nm, +26dBm to -50dBm  
43: 1310nm & 1550nm, +26dBm to -50dBm  
44: 1310nm & 1625nm, +26dBm to -50dBm  
45: 1490nm & 1550nm, +26dBm to -50dBm  
46: 1490nm & 1625nm, +26dBm to -50dBm  
47: 1550nm & 1625nm, +26dBm to -50dBm

61: 850nm & 1310nm , +26dBm to -45dBm  
62: 1310nm & 1490nm , +26dBm to -45dBm  
63: 1310nm & 1550nm , +26dBm to -45dBm  
64: 1310nm & 1625nm , +26dBm to -45dBm  
65: 1490nm & 1550nm , +26dBm to -45dBm  
66: 1490nm & 1625nm , +26dBm to -45dBm  
67: 1550nm & 1625nm , +26dBm to -45dBm

### Adapter for Model A OPM

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

\* Model A OLS port: Built-in universal 2.5mm tip sleeve

\* Model B single port: Built-in universal 2.5mm tip sleeve

## 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 Model A OLS Port or Model B Single Port

A0-00121	2.5mm Universal Connector Male to FC Female Adapter
A0-00122	2.5mm Universal Connector Male to SC Female Adapter
A0-00123	2.5mm Universal Connector Male to LC Female Adapter

### Adaptor for Model A OPM Port

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
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### 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

02-00411	Reusable Fiber Cleaner--1 slot
02-00412	Reusable Fiber Cleaner--2 slots
02-00421	Cartridge--1 slot
02-00422	Cartridge--2 slots

### Replacement Parts

A0-00001	Battery Cover Cap
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**Example** : OLM 01-0A301 + A0-00101  
Option: A1-01104 、 A0-00121 、 A0-00101 、 A0-00201 、 A0-00301



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