



Ascentac TestMate2400 Series, Multi-channel Optical Power Meter, delivers high accuracy across a wide dynamic range. Fully compatible with both SM and MM fibers, it is ideal for the simultaneous testing of multi-channel optical components.

# Multi-channel Optical Power Meter

## Ascentac TestMate2400

Desk-top 1 to 4 Channel OPM with High Accuracy and a Wide Dynamic Range

### | Feature

- Wide Dynamic Range up to 76 dB High Accuracy of  $\pm 3\%$
- Exceptional 0.001 dB Resolution
- Low-brightness, eye-comfort display for extended use
- Space-saving design for vertical or horizontal placement
- Supports remote control via Ethernet port
- USB Type-C charging

### | Application

- Research, manufacturing, and testing of optical components

## Description

Its compact, dual-orientation design maximizes valuable bench space. The intuitive interface and clear display streamline the entire testing workflow, ensuring a user-friendly and efficient experience.

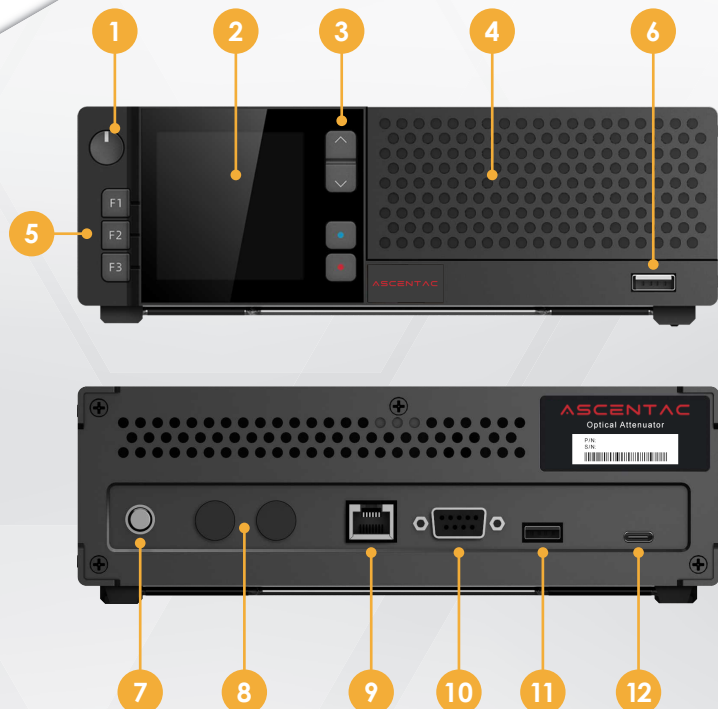
For data management, test results can be stored directly to a USB drive. The standard Ethernet (LAN) and RS232 ports provide robust options for remote control and automated testing, with seamless data transfer to a PC to boost overall productivity.

## Vertical or Horizontal. Always Compact.

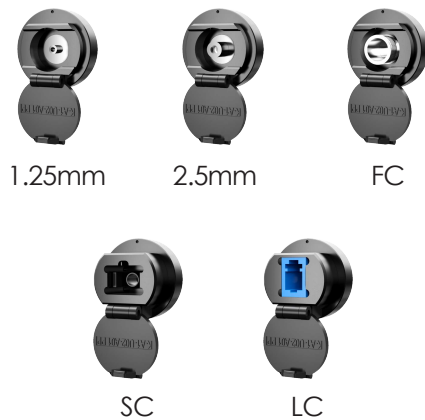


## Appearance

- 1 Power switch
- 2 2.7-inch color screen
- 3 Control knob
- 4 Dust cap for optical interface
- 5 Function keys
- 6 USB-A port
- 7 Grounding terminal
- 8 External detector interface
- 9 Ethernet port
- 10 RS232 port
- 11 USB-A port
- 12 USB Type-C charging port



## | Quick-Swap Design for Fast & Easy Connector Changes



## | Optical Component Testing

Insertion loss measurement for optical splitters with OLS



Fiber-optic splitter



Multi-channel  
optical power meter



# Specification

## OPM

|                               |   |            |
|-------------------------------|---|------------|
| Channels                      | 1、2 or 4  |            |
| Operating Wavelength (nm)     | 700 to 1700   |            |
| Calibrated Wavelengths        | 850, 1300, 1310, 1490, 1550, 1625, CWDM wavelengths |            |
| Detector Type                 | InGaAs ( $\phi$ 1mm or $\phi$ 2mm)                  |            |
| Power Measurement Range (dBm) | +10 to -70  | +26 to -50 |
| Maximum Input Power (dBm)     | 16  | 28         |
| Power Accuracy (dB)           | $\pm$ 3%  |            |
| Resolution (dB)               | 0.001   |            |
| Linearity (dB)                | $\pm$ 0.03  |            |
| Return Loss (dB)              | > 55  |            |
| Averaging Time                | 1ms、10ms、100ms、500ms、1s、5s、10s                      |            |
| Optical Connector Type        | 2.5mm universal, 1.25mm universal, FC, SC, LC       |            |

## Display

2.7-inch color display  
Resolution: 320 x 320 pixels

## Interface

1. 2 USB ports
2. USB-C charging port
3. Ethernet port (RJ45)
4. RS232 port
5. External detector interface
6. Grounding terminal

## Environment

|                          |                      |
|--------------------------|----------------------|
| Working Temperature (°C) | 0 to 50              |
| Storage Temperature (°C) | -20 to 70            |
| Relative Humidity (%)    | < 90, Non-condensing |

## Dimension and Weight

|                |                |
|----------------|----------------|
| L x W x H (mm) | 215 x 210 x 65 |
| Weight (g)     | 800            |

## Standard Accessories

Main unit, Power adapter, USB power cable, 1-year warranty

Note:

1. At an ambient temperature of  $23 \pm 2^{\circ}\text{C}$ .
2. Measured with an FC/PC polished connector.
3. With a -20 dBm Continuous Wave (CW) input at 1550 nm, and a spectral width of < 10 nm.
4. Recommended calibration interval: 2 years.

## External Detector (Option)

|                               |   |  |
|-------------------------------|---|--|
| Channel                       | 1 or 2  |  |
| Operating Wavelength (nm)     | 700 to 1700   |  |
| Calibrated Wavelengths        | 850, 1300, 1310, 1490, 1550, 1625, CWDM 18 wavelengths (Option) |  |
| Detector Type                 | InGaAs ( $\phi$ 10mm)   |  |
| Power Measurement Range (dBm) | +26 to -60  |  |
| Maximum Input Power (dBm)     | 28  |  |
| Power Accuracy (dB)           | $\pm$ 3%  |  |
| Resolution (dB)               | 0.001   |  |
| Linearity (dB)                | $\pm$ 0.03 (-50 to +25dBm)                                      |  |
| Return Loss (dB)              | > 55  |  |
| Warm-up Time (mins)           | 20  |  |
| Optical Connector Type        | 2.5mm universal, 1.25mm universal, FC, SC, LC                   |  |

## Interface

|        |         |
|--------|---------|
| Power  | DIN-422 |
| Output | BNC     |

## Environment

|                          |                      |
|--------------------------|----------------------|
| Working Temperature (°C) | 0 to 50              |
| Storage Temperature (°C) | -20 to 70            |
| Relative Humidity (%)    | < 90, Non-condensing |

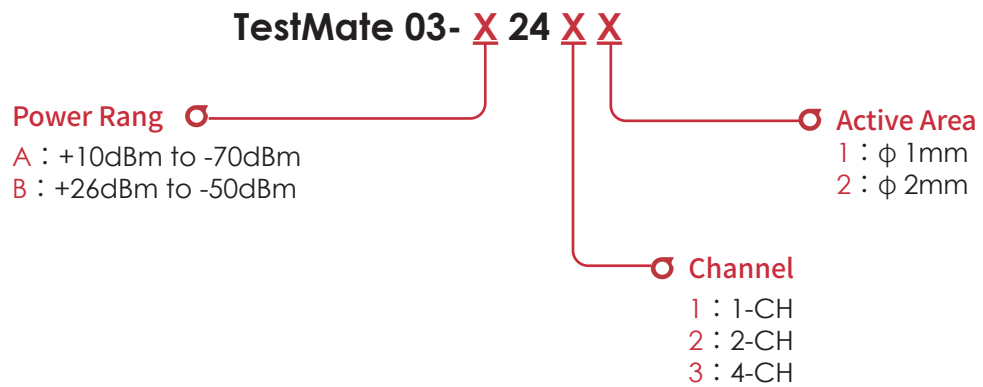
## Dimension and Weight

|                |                 |
|----------------|-----------------|
| L x W x H (mm) | 130.7 x 52 x 40 |
| Weight (g)     | 400             |

Note:

1. At an ambient temperature of  $23 \pm 2^{\circ}\text{C}$ .
2. Measured with an FC/PC polished connector.
3. With a -20 dBm Continuous Wave (CW) input at 1550 nm, and a spectral width of < 10 nm.
4. Recommended calibration interval: 2 years.

## Ordering Information



**Note:** 1. Interchangeable adapters are available: 2.5mm universal, 1.25mm universal, FC, SC, and LC. Please specify your choice when ordering.

**Example:** TestMate 03-A2432 , Universal 2.5mm

