The SmartClass Fiber OLP-85 and -85P combine pass/fail fiber inspection and optical power measurement (OPM) into one solution. With a 100 dB dynamic range, the OLP-85 and -85P handheld optical power meters are professional, versatile, and compact instruments perfect for any fiber-optic network power or loss test applications. Their high accuracy over the entire range means that the OLP-85 and -85P perfectly fit applications where low power or very high power needs to be measured.

In addition to providing a full day of battery-operated field use, the SmartClass Fiber OLP-85 and -85P are perfect for fixed installations in central offices, production environments, and for laboratory workbenches because they can operate via mains or be remotely controlled via USB 2.0 and Ethernet.

The OLP-85 and -85P are compatible with the P5000i digital analysis microscope so users can check fiber end-face quality and get pass/fail acceptance results with one button push.

The OLP-85P features an integrated patch-cord microscope (PCM) for added value and improved workflow efficiency.

Combining the Viavi Solutions® OLS-85 optical light source and OLP-85 and -85P optical power meters provides the greatest functionality, and automated tests avoid handling errors and speed testing. Automatic functions, such as auto-lambda and multi-lambda test, enable users to receive information about emitted wavelengths, automatically set wavelengths on the compatible power meter, and accurately measure up to four wavelengths simultaneously. Users can also easily save test results (power, loss, fiber inspection) with real-time stamps on the OLP-85 and -85P to generate comprehensive certification reports.

**Key Features**

- Complete jobs faster, correctly, and on time—the first time with uniquely integrated fiber inspection and test with auto pass/fail analysis
- Battery-operated field-portable optical power meters with an 800 to 1700 nm measurement wavelength range and high accuracy over an ultra-wide 100 dB dynamic range
- 3.5-in color touch screen with integrated stylus
- Automated pass/fail fiber inspection analysis with the optional P5000i microscope, also available with integrated PCM
- Individual threshold settings for power and loss pass/fail analysis
- Onboard fiber inspection and test results storage with time stamp
- Data transfer and remote control via USB, Ethernet or optional WiFi connection
- Auto-lambda and multi-lambda test functions communicate with Viavi light sources
- In-service loss test option
- Rugged, weather-proof design
- SmartPowerOn functionality for instantaneous power on
Specifications

**OLP-85 and -85P**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLP-85 optical power meter</td>
<td>2307/03</td>
</tr>
<tr>
<td>OLP-85P optical power meter with integrated patch cord microscope (PCM)</td>
<td>2308/03</td>
</tr>
</tbody>
</table>

**Ordering information**

**OLP-85 and -85P optical power meters include:**
SmartClass Fiber instrument, SC2 soft shoulder case, one optical adapter, Alkaline batteries (8x), quick start manual and safety instructions.

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**Options and Accessories**

- P5000i digital analysis microscope with 4 tips: FBP-SD101
- RBP2 rechargeable battery pack for SmartClass Fiber; LiON battery 3.7 V, 20 W: 2305/90.02
- PS4 power supply for SmartClass Fiber, 12 V, 2 A: 2305/90.01
- SmartClass Fiber WiFi option including USB wifi-adapter: 2327/90.21
- UC4 hands-free carrier for SmartClass Fiber: 2128/01
- UC4P hands-free carrier for SmartClass Fiber with PCM: 2128/02
- SC2 soft shoulder case, for SmartClass Fiber: 2128/03
- USB cable USB-A to micro-USB: K 807

**Adapters**

- FC: 2014/00.09
- DIN: 2014/00.17
- ST: 2014/00.21
- SC: 2014/00.24
- E2000: 2014/00.26
- UPP 1.25 mm: 2014/00.28
- LC: 2014/00.29
- UPP 2.5 mm: 2014/00.31

**Notes:**

1. Valid for calibrated wavelengths 1310 nm, 1490 nm, 1550 nm at reference conditions, at -34 dBm (CW), 23°C ±3K, 9µm test fiber with SC/PC ceramic connector. Intrinsic uncertainty for calibrated wavelengths 850nm (at -20dBm), 980 nm (at -22dBm) and 1625 nm (at -24dBm) is ±0.25 dB (±6%).
2. -75 dBm to +26 dBm, -5°C to +45°C
3. Overall measurement uncertainty for 800 to 1700 nm:
   - 800 nm to 1300 nm: ±0.7 dB ±25 nW
   - 1300 nm to 1550 nm: ±0.4 dB ±5 nW
   - > 1550 nm: ±0.7 dB ±5 nW
4. With Viavi optical light sources, 800 nm to 1625 nm and level > -50 dBm

**Detectors**

<table>
<thead>
<tr>
<th>Detector Type</th>
<th>Filtered InGaAs</th>
</tr>
</thead>
</table>

**Measurement Range**

-75 to +26 dBm

**Max. permitted input level**

+30 dBm

**Intrinsic uncertainty**

±0.15 dB (±3.5%)

**Automatic offset nulling**

Yes

**Overall measurement uncertainty**

850 nm, 980 nm: ±0.35 dB ±25 nW
1310 nm, 1490 nm: ±0.25 dB ±5 nW
1550 nm: ±0.25 dB ±5 nW
1625 nm: ±0.35 dB ±5 nW

**Wavelength range/Settings**

800 to 1700 nm in 1 nm step

**Calibrated wavelengths**

850, 980, 1310, 1490, 1550, 1625 nm

**Display resolution**

0.01 dB/0.001 µW

**Measurement units**

dB, dBm, W

**Power meter functions**

Abs, rel, pass/fail

**Auto functions**

Auto-λ / Multi-λ function

**Tone Detection**

270 Hz, 1 kHz, 2 kHz

**Data storage**

Up to 10,000 test results with time stamp, inspection jpg

**Battery life**

>13 hr (LiION)/>11 hr (alkaline)

**Warm-up time**

None, instant On

**General**

**Display**

3.5-in color LCD touch screen, 4:3 ratio

**Data readout**

Via USB interface

**Remote control**

Via USB or Ethernet

**Wireless connectivity**

Via USB WiFi adapter (optional)

**Inspection functions**

Auto pass/fail, store end-face image

**Optical interfaces**

Free space, interchangeable adapters (2014/00.xx type, PC and APC)

**Electrical interfaces**

USB 2.0 (2 x host, 1 x device)

**Power source**

AC adapter, 8x AA alkaline, or rechargeable LiION battery pack (option)

**Power mode**

Auto-Off, SmartPowerOn mode

**Dimensions (H x W x D)**

- **OLP-85**
  208 x 112 x 64 mm (8.2 x 4.4 x 2.5 in)
- **OLP-85P**
  208 x 153 x 64 mm (8.2 x 6.0 x 2.5 in)

**Weight**

- **OLP-85**
  750 g (1.6 lb)
- **OLP-85P**
  850 g (1.85 lb)

**Temperature range**

- **Operating**
  -10 to +55°C (14 to 122°F)
- **Storage**
  -20 to +70°C (-4 to 158°F)