



SmartClass™ Fiber

OLP-85 and -85P inspection-ready optical power meters

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 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 or Ethernet interface
- Auto-lambda and multi-lambda test functions communicate with Viavi light sources
- In-service loss test option
- Rugged, weather-proof design

Data Sheet

Specifications

OLP-85 and -85P	
Detector type	Filtered InGaAs
Power measurement range	-75 to +26 dBm
Max. permitted input level	+26 dBm
Intrinsic uncertainty ¹	±0.13 dB (±3%)
Automatic offset nulling	Yes
Wavelength range	800 to 1700 nm in 1 nm step
Calibrated wavelengths	850, 980, 1300, 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 ²	Auto- function: automatic single-wavelength detection Multi- function: automatic multi-wavelength detection
Tone detection	270 Hz, 1 kHz, 2 kHz
Data storage	Up to 10,000 test results Abs, rel. power with time stamp, inspection jpg
Battery life	>13 hr (LiON)/>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 capability	Via USB or Ethernet
Inspection functions	Live, freeze, store end-face image, auto pass/fail
Optical interfaces	Interchangeable adapters for FC, ST, SC, DIN, E2000, LC, 1.25 and 2.5mm connector type (PC or APC)
Electrical interfaces	USB 2.0 (2 x host, type A, 1 x device, Micro-B)
Power source	AC adaptor, 8x AA alkaline, or rechargeable LiON battery pack
Power mode	Active, auto-Off (programmable)
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)

- Under reference conditions: at calibrated wavelengths ±1 nm, -20 dBm (CW), 23°C ±3K, 9 µm test fiber with SC/PC ceramic connector
- Works in conjunction with the OLS-3x, OLS-5x, and OLS-8x

Ordering information

OLP-85 and -85P optical power meters include:

- SmartClass Fiber instrument
- SC2 soft shoulder case for SmartClass Fiber
- One optical adapter (2014/00.xx type)
- Quick start manual and safety instructions
- Alkaline batteries (8x)

Description	Part Number
OLP-85 optical power meter	2307/03
OLP-85P optical power meter with integrated patch cord microscope (PCM)	2308/03

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
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

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