

SmartClass™ Fiber

OLS-85 Inspection-Ready Optical Light Source



The SmartClass Fiber OLS-85 handheld light source is a professional, versatile, and compact instrument used for fiber-optic network qualification and certification. Its specific wavelength combinations make it optimal for link loss testing and long-haul, metro, and access telecommunication network characterization, as well as data center and local area network testing.

In addition to providing a full day of battery-operated field use, the SmartClass Fiber OLS-85 is perfect for fixed installations in central offices, production environments, and laboratory workbenches because it can operate via mains with remote-control capabilities via USB 2.0 and Ethernet.

Adding the P5000i fiber inspection microscope to the OLS-85 lets users check fiber end-face quality and get fully automatic pass/fail acceptance results at the push of button.

Combining the Viavi Solutions OLS-85 Optical Light Source and OLP-85 Optical Power Meter provides the greatest functionality and test automation and avoids handling errors and speeds testing. Automatic functions, such as auto-λ and multi-λ test, send information about the emitted wavelengths to the receiver to automatically set wavelengths on a compatible power meter to accurately measure up to four wavelengths simultaneously. Users can generate and save comprehensive test reports on the OLP-85.

The OLS-85 inspection-ready optical light source can be used anywhere today's fiber technicians go, up poles or down holes. Technicians get ultimate flexibility and performance from this powerful easy-to-use solution that can help any technician become an instant fiber expert.

Key Benefits and 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 light source with up to 4 wavelengths
- 3.5-inch color touch screen with integrated stylus
- Quad version (850, 1300, 1310, 1550 m) with encircled flux (EF)-compliant launch conditions at 850 nm
- FTTx/PON version with 1310, 1490, 1550, and 1625 nm wavelengths
- Automated pass/fail fiber inspection analysis with the optional P5000i microscope
- Adjustable output level
- Auto-λ and multi-λ test functions communicate with Viavi power meters
- In-service loss test option
- Rugged, weather-proof design

Specifications

OLS-85	OLS-85 2313/01	OLS-85 2313/22	OLS-85 2313/06 2313/26	OLS-85 2313/05
Nominal wavelengths ¹	1310/ 1550 nm	1310/1550/ 1625 nm	1310/ 1490/ 1550/ 1625 nm	MM: 850/1300 nm SM: 1310/1550 nm
Spectral width	<5 nm	<5 nm	<5 nm	MM: 50/170 nm SM: 5/5 nm
Launch conditions				EF compliant at 850 nm
Output power (settable in 0.01 dB steps)	0 to -3 dBm	-3 to -6 dBm	-3 to -6 dBm	MM: -20 to -23 dBm SM: 0 to -3 dBm
Stability ² 15 min/8 hr	0.02/0.2 dB	0.02/0.2 dB	0.02/0.2 dB	0.02/0.2 dB
Source modes	CW, tone, auto-λ3, multi-λ3			
Tone generator	270 Hz, 1 kHz, 2 kHz			
Battery life	>10 h (lithium-ion, LiON)/ >8 h (alkaline)			
Optical interface	PC	APC	PC (2313/06) APC (2313/26)	PC (50/125μm MM port) PC (SM port)
Adapter type	Interchangeable SC, FC, ST adapters			

- ±20 nm for 850/1300/1310/1550 nm and ±3 nm for 1490/1625 nm
- Between -10 to +55°C with ΔT = ±0.3 K after a 20-minute warm-up
- Works in conjunction with OLP-3x, OLP-55, and OLP-85

General	
Laser class	Class 1 Laser Product (IEC 60825-1:2007)
Display	3.5 in color LCD touch screen, 4:3 ratio
Data storage	Up to 5,000 inspection images
Data readout	Via USB int.
Remote control	Via USB or Ethernet
Inspection functions	Live, freeze, store end-face image, auto pass/fail
Electrical interfaces	USB 2.0 (2x 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)	208 x 112 x 64 mm (8.2 x 4.4 x 2.5 in)
Weight	750 g (1.6 lb)
Operating temperature range	-10 to +55°C (14 to 122°F)
Storage temperature range	-20 to +70°C (-4 to 158°F)

Ordering information

OLS-85 Optical Laser Sources includes:

- SmartClass Fiber instrument
- SC2 soft shoulder case, for SmartClass Fiber
- Electronic tool kit with manual, data sheet, and reporting software on USB stick.
- Optical adapters: SC-type and FC-type (interchangeable)
- Quick start manual and safety instructions
- Alkaline batteries (8x)

Description	Part Number
OLS-85 Optical Laser Sources	
OLS-85 1310/1550 nm, PC	2313/01
OLS-85 850/1300/1310/1550 nm, PC	2313/05
OLS-85 1310/1490/1550/1625 nm, PC	2313/06
OLS-85 1310/1550/1625 nm, APC	2313/22
OLS-85 1310/1490/1550/1625 nm, APC	2313/26
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
SC22 soft shoulder case, for SmartClass Fiber	2128/03
FC-type optical adapter	2155/00.05
SC-type optical adapter	2155/00.26
ST-type optical adapter	2155/00.32
USB cable USB-A to Micro-USB	K 807

