

OLTS 5 Optical Loss Test Set



features

- Integrated dual-wavelength laser source and optical power meter
- Automatic bi-directional, dual-wavelength insertion loss measurement
- Optical power meter and light source manual test modes
- Internal storage for up to 1,000 bi-directional, dual-wavelength test results
- Fast serial data transfer to a PC with provided Windows® software
- (AA) alkaline. Optional internally recharged NiMH battery pack or AC adapter

applications

- Certify single-mode fiber insertion loss at 1310/ 1550 nm or 1550/ 1625 nm
- Verify optical power levels
- Equipment and cable trouble-shooting

ordering information

The OLTS 5 test kit includes: (1) OLTS 5, (2) AA alkaline batteries, PC software, (1) adapter cap of the same connector type as the transmit port, and a carry case. When ordering, specify transmit port connector type after the model number, for example OLTS 5-3 SC.

The OLTS 5 Optical Loss Test Set series offers end-to-end single-mode testing at either 1310/ 1550 nm (OLTS 5-3 model) or 1550/1625 nm (OLTS 5-5 model). The OLTS 5 may be operated in automatic or manual test modes. In its "two-unit" automatic test mode, a pair of OLTS 5 test sets may be used to measure the end-to-end, bi-directional insertion loss of a pair of single-mode fibers at 1310/1550nm or 1550/1625 nm. Tests are started and controlled by the user from the OLTS 5 configured as the Main unit. Test progress messages and results are displayed on the Remote unit. Full test results can be reviewed and saved in the Main unit. Thresholds may be set to provide Pass/Fail results. In its "single-unit" automatic test mode the OLTS 5 can measure bi-directional, dual-wavelength insertion loss of patch cords, or fiber optic cables while they are still on the reel.

In the manual operating mode individual OLTS 5 test sets can operate either as an optical power meter (OPM) or dual-wavelength laser source.

The OLTS 5 can store dual-wavelength, bi-directional insertion loss results for up to 1,000 fibers. Test results can be organized in up to 20 user-named files. Results are transferred to a PC via a serial link. Windows® software is provided to view, edit, and print test results.

OLTS 5 units are sold individually but normally used in pairs.

specifications

Model	OLTS 5-3	OLTS 5-5
transmit port (laser source) specifications		
Center wavelengths	1310 /1550 ± 20 nm	1550/1625 ± 20 nm
Emitter type	Laser, Class 1 (FDA and IEC)*	
Output power into 9/125 µm (single-mode) fiber	-5 dBm (nominal)	
Stability	± 0.1 dB, up to 8 hours	
Insertion loss and power measurement resolution	0.01 dB	
Available connector types	SC or FC	
receive port (optical power measurement) specifications		
Detector type	InGaAs	
Calibrated wavelengths	850, 980, 1300, 1310, 1480, 1550, 1625 nm	
OPM (manual) mode optical power display range	+ 10 to - 70 dBm	
OLTS (automatic) mode insertion loss measurement range	45 dB	
Accuracy at -10 dBm, 25°C	± 0.25 dB	
Connector types	Thread-on adapter cap mount	
general specifications		
Display	128 X 64 dot matrix liquid crystal display	
Dimensions (H x W x D)	18.5 X 11.1 X 4.6cm (7.3 X 4.4 X 1.8in)	
Weight	0.55 kg (1.2 lbs.)	
Operating temperature and humidity	0 to +50°C, 90% RH (non-condensing)	
Storage temperature and humidity	-20 to +60°C, 95% RH	
Power	2 AA Alkaline (2-cell NiMH-or AC adapter optional)	
Battery life (typical)	(2) AA - 17 hours; NiMH battery pack - 11 hours	

* FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1 amended Q2, 2001

Note: All specifications at room temperature (25°C) unless indicated otherwise.

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