

938-Series Optical Loss Set (OLS)/Optical Power Meter (OPM)

The 938-Series OLS/OPM Test Set is used to test active and passive fiber optic components, installations and systems. The portable test set features an optical power meter and a stabilized optical source in an AC- or battery-operated, hand-held unit with microprocessor control of complex functions.

The test set may be used as a high-sensitivity power meter on single-mode and multimode fibers, and as an optical loss test set on multimode fibers. The same procedure may be used on single-mode except an external light source is needed, such as the 736A or 736C transmitter, or the 941A Optical Talk Set. The test set's internal detector is Indium-Gallium-Arsenide (InGaAs), is calibrated at 4 wavelengths (850, 875, 1300, and 1550 nm), has a power measurement range of +3 to -60 dBm (2 mW to 1 nW), and is accurate within a range of ± 3 to -60 dBm (2 mW to 1 nW), and is accurate within a range of $\pm 5\%$.

The test set will accept a variety of stabilized light-emitting diode (LED) optical source modules (OSMs), which are sold separately and are user interchangeable. Precision interface between the test set and bare or terminated optical fiber is provided by connector adapters, sold separately in various connector designs.

Physical Specifications

Length: 6.5 in. (16.5 cm)
 Height: 1.5 in. (3.81 cm)
 Weight: 1 lb./450 grams
 Width: 3.5 in. (8.89 cm).

Operating Temperature: 32 °F to 113 °F (0 °C to 45 °C)

Storage Temperature: -4 °F to +140 °F (-20 °C to +60 °C)

Relative Humidity: 70% noncondensing

Electrical Specifications:

Peak Wavelength for Standard Modules:

10 nm at 850 nm and 875 nm (nominal)
 20 nm at 1300 nm and 1550 nm (nominal).

Spectral Width (FWHM):

50 nm at 850 nm
 20 nm at 1300 nm.

Output Stability:

$\leq \pm 0.5$ dB over 8 hours at constant temperature

Power Meter, Optical 938A



938A Optical Power Meter

The 938A Optical Power Meter is a light weight, battery or 120V AC operated, hand-held unit that allows for measurement of optical signals from transmitters, single-mode or multimode fibers, and is calibrated at 4 wavelengths (850, 875, 1310, and 1550 nm). The 938A has a digital LCD readout, and will accept a variety of standardized LED Optical Source Modules (OSMs) in order to upgrade the 938A to the 938A1 or 938A2 Optical Loss Test Set.

Product Code	Comcode
938A	104 374 137