



OFL 250 Handheld OTDR

The Noyes OFL 250 from Fujikura Europe Ltd is a single-mode OTDR with an integrated Optical Power Meter (OPM), Laser Source (OLS), and Visual Fault Locator (VFL) in a handheld package weighing only 0.8 kg (1.7 lb). With short dead zone and mid-range dynamic range performance, the OFL 250 is ideal for testing optical fibers in service provider metro areas and FTTH networks.

The OFL 250 provides automatic and manual setup, precision event analysis, multiple-wavelength testing, a 12-hour battery life, internal data storage, and USB connectivity. OTDR and OPM test ports are equipped with tool-free adapters, which can be changed in seconds.

Results are saved as industry standard .SOR files, which can be transferred to a PC for viewing, printing, and analyzing with the supplied Windows® compatible software.

Features

- Handheld, 0.8 kg (1.7 lb)
- Multiple-wavelength single-mode OTDR
- 1.5 m (typ.) event dead zone
- 26 dB dynamic range
- Integrated OPM, OLS, and VFL (650 nm)
- Tool-free, switchable adapters for OTDR & OPM ports (FC, SC, ST, LC, E2000 are available)
- Bellcore (GR-196) .SOR file format
- Rechargeable (> 12 hr) Lilon battery or AC power
- 3.5-inch, indoor/outdoor LCD
- Windows® compatible software to view, print, and archive test record
- Mini USB Port (connect to PC with cable)

Ordering Information

| MODEL NUMBER | DESCRIPTION | Wavelengths |
|----------------|--------------------------|-------------------|
| OFL2-26-0910PR | OFL 250 Single-mode OTDR | 1310/1550 nm |
| OFL2-26-0924PR | OFL 250 Single-mode OTDR | 1310/1550/1625 nm |

Note: All OFL 250 models come with: a carry case, SC and FC adapters for the OTDR/OLS port, 2.5 mm universal adapters for the OPM and VFL ports, USB cable (connects with normal (Type A) USB port on your PC), AC power adapter, country-specific power cord, and a user guide.

OFL 250 Handheld OTDR Specifications

| OTDR Specifications | |
|--|--|
| Emitter Type | Laser |
| Safety Class | Class 1 FDA 21 CFR 1040.0 & 1040.11 |
| Fiber Type | Single-mode |
| Center Wavelengths | 1310 / 1550 /1625nm |
| Wavelength Tolerance | ± 20/ ± 20/ ± 10nm |
| Dynamic Range (SNR=1) | 26 / 26 /26dB |
| Event Dead Zone ¹ | 1.5 m |
| Attenuation Dead Zone @ 5ns ² | Typ.6.0 m, max 6.5 m |
| Pulse Widths | 5, 10, 30, 100, 300 ns, 1, 3, 10 μs |
| Range Settings | 250 m to 256 km |
| Data points | Up to 16,000 |
| Data Point Spacing | 12.5 cm (range ≤4 km), Range/16000 (range > 4 km) |
| Group Index of Refraction (GIR) | 1.4000 to 1.6000 |
| Distance Uncertainty (m) | ± (1 + 0.005% x distance + data point spacing) |
| Trace File Format | Bellcore GR-196 V.1.1 |
| Trace File Storage Medium | Internal memory (> 1000 traces) |
| Data Transfer to PC | USB cable |
| OTDR Modes | Full Auto, End Locate, Expert, Live |

1. Typical distance between the two points 1.5 dB down each side of a reflective spike caused by a -45 dB event using 10 ns pulse width.

2. Typical distance from event location to point where trace is within 0.5 dB of backscatter.

| Optical Power Meter Specifications | |
|------------------------------------|---------------------------|
| Calibrated Wavelengths | 1310, 1490, 1550, 1625 nm |
| Detector Type | InGaAs |
| Measurement range | +23 to -45 dBm |
| Tone detect range | +3 to -35 dBm |
| Wavelength ID range | +3 to -35 dBm |
| Accuracy (dB) | ± 0.25 dB |
| Resolution (dB) | 0.01 dB |
| Measurement units | dB, dBm, mW, nW |

| Optical Light Source Specifications | |
|-------------------------------------|---|
| Emitter Type | Laser, Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1) |
| Fiber Type | Single-mode |
| Center Wavelengths | 1310/1550/1625 nm |
| Wavelength Tolerance | ± 20/ ±20/ ±10 nm |
| Spectral Width (FWHM) | 2 nm (max) |
| Internal Modulation | 1 kHz, 2 kHz |
| Wavelength ID | Compatible with Noyes Optical Power Meters & Light Sources |
| Output Power Stability | < ± 0.25 dB after 15 min |
| Output Power | - 3 dBm |

| Visual Fault Locator Specifications | |
|-------------------------------------|---|
| Emitter type | Laser |
| Safety Class | Class 1 (FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1:1994, IEC 825-1:1993) |
| Wavelength | 650 nm |
| Output Power (nominal) | 0.8 mW into SMF-28 |

| General | |
|--|--|
| Size (in boot) | 190 x 112 x 47 mm (7.5 x 4.4 x 1.9 inches) |
| Weight | 0.8 kg (1.7 lb) |
| Operational Temperature | -10 to +50°C, 0 to 95% RH (non-condensing) |
| Storage Temperature | -20 to +60°C, 0 to 95% RH (non-condensing) |
| Power | Rechargeable Lilon or AC adapter |
| Battery life (backlight ON in OTDR mode) | > 12 hours |
| Display | LCD, 320 x 240, 3.5 inch (89 mm) , color, transfective |
| OTDR and OPM ports | Switchable. See website or contact Fujikura for available adapter types. |