



OPM4-FTTx PON Power Meter

The Noyes OPM4-FTTx from AFL Telecommunications is designed to measure optical power in FTTH and other passive optical networks (PONs) that use 1490 nm for downstream data and 1550 nm for downstream video traffic. In addition, the OPM4-FTTx provides an integrated Visual Fault Locator (VFL) - 650 nm (red) laser for short-range fault location and connectivity testing.

Equipped with wavelength filters and a dual photo detector, the OPM4-FTTx can separately and simultaneously measure 1490 and 1550 nm power at the ONT or other points in an FTTx PON. A large, dual-wavelength LCD display with backlight shows power at both wavelengths (in units of dB or μ W). A "set reference" feature may be used to compare 1490 or 1550 nm power levels (in units of dB) measured at different parts of the network.

The power meter and VFL ports accept Noyes thread-on style adapter caps and are compatible with angled or non-angled connectors. The OPM4-FTTx offers an automatic power shut-off feature, long battery life from standard AA alkaline batteries, and is fully N.I.S.T. traceable.

Features

- BPON, GPON, and EPON compatible
- Simultaneous power measurement at 1490 and 1550 nm
- Power shown in units of dBm or μ W
- Comparison of power levels in dB
- Integrated VFL
- Auto power shut-off feature
- Dual-wavelength, sunlight readable LCD display
- Compatible with APC or UPC connectors
- Standard alkaline AA batteries
- Handheld, rugged, lightweight
- N.I.S.T. traceable

Applications

- ONT splitter installation testing
- Fault-locating drop cables and F2 fibers from FDH to ONT

Specifications

POWER METER	
Calibrated wavelengths	1490 nm, 1550 nm
Signal format	CW or downstream BPON, GPON, or EPON
Detector type	Filtered InGaAs
Measurement range	+10 to -50 dBm @ 1490 nm; +20 to -50 dBm @ 1550 nm
Accuracy*	± 0.5 dB (± 0.35 dB typical)
Resolution	0.01 dB
Measurement units	dB, dBm, μ W
VFL LASER	
Output power (typical)	0.8 mW
Wavelength (nominal)	650 nm
Safety	Class II, FDA 21 CFR 1040.10 & 1040.11; IEC EN60825-1:2007
GENERAL	
Power	2 x AA batteries
Battery life (typical)	Power meter: 100 hours Power meter + VFL: 16 hours Power meter (backlight on): 16 hours Power meter (backlight on) + VFL: 5 hours
Operating temperature	-10 to 50°C, 90% RH (non-condensing)
Storage temperature	-30 to 60°C, 90% RH (non-condensing)
Size (H x W x D)	14.0 x 8.1 x 3.8 cm (5.5 x 3.2 x 1.5 in)
Weight	0.26 kg (0.58 lb)

* At calibration power levels of approximately -5 dBm for 1550 nm and -10 dBm for 1490 nm.
All specifications at 25°C

Ordering Information

MODEL	INCLUDES
OPM4-FTTx	OPM4-FTTx PON power meter, 2 x AA batteries, protective rubber boot, SC adapter for power meter port, 2.5 mm universal adapter for VFL port, user's guide, and carry case.

* Additional adapters are available and must be ordered separately

