

Test and Inspection

NOYES® **MLP4-2 Multimode Test Kit with Wave ID and Set Reference**



Features

- Hand-held, rugged, lightweight
- Wave ID (auto identification and switching)
- Dual or single Wave ID, CW
- Large LCD with backlight (OPM4-2D)
- Power measurements in dBm or μ W; insertion loss in dB
- Reference power level storage
- Low battery indicator
- Long battery life with 2 AA alkaline
- Free 50 μ m and 62.5 μ m mandrels
- Cost-effective, easy-to-use
- N.I.S.T traceable

The MLP4-2 test kit combines the OPM4-2D optical power meter and OLS1-Dual LED light source and is ideally suited for testing multimode fiber optic networks.

The OLS1-Dual features 850 and 1300 nm LED output from a single output port and is easy to operate with only a power button and a wavelength select button. Each wavelength may be transmitted individually at CW or with Wave ID. When transmitting with Wave ID, the OLS1-Dual supports transmitting pairs of wavelengths in an alternating pattern. Associated with each operating condition, the designated LED indicator will illuminate to identify the currently enabled operating mode and emitted wavelength(s) along with battery charge status and external power presence. The OLS1-Dual output port is equipped with UCI based removable adapters to allow the output connectors to be inspected and cleaned.

When used with the OLS1-Dual, the OPM4-2D offers automatic wavelength identification and switching-Wave ID feature that automatically detects and sets the wavelength(s), preventing setup and measurement errors. It significantly increases efficiency and reduces technician errors—and saves testing time—by eliminating the need to test each wavelength individually. The OPM4-2D stores optical references for each calibrated wavelength and offers multiple test tone detection for fiber identification. The OPM4-2D optical input port accepts a variety of NOYES thread-on style adapter caps (ordered separately) to meet a wide range of testing requirements. The MLP4-2 test kit is fully N.I.S.T. traceable.

Applications

- Certify multimode fiber links per TIA/EIA standards
- The 1300 nm output can also be used to test short distance (up to 10 km) single-mode fiber links



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OPM4-2D Specifications ^a

OPTICAL	OPM4-2D
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550 nm
Detector Type	Germanium (Ge)
Measurement Range	+6 to -60 dBm
Tone Detect Range	+6 to -50 dBm +6 to -45 dBm for 850 nm
Wavelength ID Range	+6 to -50 dBm +6 to -45 dBm for 850 nm
Accuracy ^d	±0.25 dB
Resolution	0.01 dB
Measurement Units	dB, dBm, µW
GENERAL	
Power	2 AA batteries, optional AC adapter
Battery Life	300 hours
Operating Temperature	-10°C to 50°C, 90 % RH (non-condensing)
Storage Temperature	-30°C 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)

Notes:

- All specifications valid at 25°C unless otherwise specified.
- Output power will be approximately 3 dB less if a 50 µm mandrel-wrapped jumper is used instead of a 62.5 µm mandrel-wrapped jumper.
- May be used to test 50 or 62.5 µm fiber with supplied mandrels.
- Accuracy measured at 25°C and -10 dBm per N.I.S.T. standards.

Ordering Information

Test jumpers and connector adapters are required for operation (purchased separately). Test jumpers with a variety of connector styles and fiber types and adapter caps for most common connectors may be purchased from AFL.

Calibration Plans

AFL recommends annual calibrations on NOYES Test and Inspection products. Prepaid Cal plans offer two annual calibrations at a discounted price, a convenient calibration expiration email service, express calibration services and access to the NOYES product knowledge base. Cal Plus plans offer the same services as the Cal plans with the addition of a two year extended warranty (three years total coverage).

OLS1-Dual Specifications ^a

OPTICAL	OLS1-DUAL (SINGLE PORT)	
Wavelength	850 ±30 nm	1300 +50/-10 nm
Emitter Type	LED, Class 1 FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03	
Spectral Width	40 nm (typ)	120 nm (typ)
Output Power	>-20 dBm ^b	
Output Stability	±0.1 dB over 8 hours (after 5-minute warm-up)	
Fiber Size	62.5 µm ^c	
GENERAL		
Power	2 AA batteries, optional AC adapter	
Battery Life	Typical 30 hours, minimum 20 hours	
Available Adapters	SC, FC, ST	
Operating Temperature	-10°C to 50°C, 90 % RH (non-condensing)	
Storage Temperature	-30°C 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	0.29 kg (0.65 lb)	

INCLUDES	AFL NO.
OLS1-Dual optical light source, OPM4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 µm mandrels, and carry case.	MLP4-2

MODEL	2 YR CAL PLAN	2 YR CAL PLUS PLAN
	AFL NO.	AFL NO.
MLP4-1	CAL2-00-MLP4-1	CAL2-01-MLP4-1
MLP4-2	CAL2-00-MLP4-2	CAL2-01-MLP4-2

