

Test and Inspection

NOYES[®] MLP5-2 MM Test Kit with Wave ID, Set Reference and Data Storage



The MLP5-2 test kit combines the OPM5-2D 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. The OLS1-Dual output port is equipped with UCI based removable adapters to allow the output connectors to be inspected and cleaned.

The OPM5-2D is a full-featured, hand-held optical power meter designed for measuring optical power in premise, telco, or broadband networks and for performing insertion loss measurements on multimode or single-mode fiber optic links. The standard Wave ID feature (when used with NOYES OLS series light sources) 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 OPM5-2D stores optical references for each calibrated wavelength and offers multiple test tone detection for fiber identification.

Features

- Hand-held, rugged, lightweight
- Wave ID (auto identification and switching)
- Dual or single Wave ID, CW
- Power measurements in dBm or μ W; insertion loss in dB
- Reference power level storage
- Large LCD with backlight (OPM5-2D)
- File management system organizes stored test data (OPM5-2D)
- Storage capability > 500 fibers (OPM5-2D)
- USB port and Windows[®] compatible software for download of stored data (OPM5-2D)
- 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

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

Data Storage of Test Results

The OPM5-2D File Management system allows technicians to organize test results into multiple files and transfer stored results via USB to a PC for analyzing, generating reports, and printing. The supplied powerful PC Analysis and Reporting Tool (TRM[®] - Test Results Management software) allows users to apply industry standards based rules to test results and create comprehensive certification reports. Users can generate network Pass/Fail results demonstrating compliance to industry standards and illustrate headroom. TRM is a Windows[®] compatible software. The MLP5-2 test kit is fully N.I.S.T. traceable.



Test and Inspection

NOYES® MLP5-2 MM Test Kit with Wave ID, Set Reference and Data Storage



Powerful Pair

The MLP5-2 loss test kit and TRM® Test Results Management software are a powerful pair.

- Increases efficiency
- Reduces technician errors
- Simple to operate with minimal training required
- Provides customized professional reports

Target Markets

Anyone testing fiber links who requires report generation applications include:

- Data networks
- Telecommunications providers
- CATV
- Industrial

Wave ID Increases Efficiency and Reduces Errors

- Enables users to test two wavelengths simultaneously
 - Significantly reduces test time by eliminating the need to test each wavelength individually
- Automatically detects and sets received wavelengths
 - Eliminates loss measurement errors by automatically matching OPM to transmitted wavelength

Straightforward Results Storage and Easy File Management in the Field

- Simple to use interface allows for easy separation of results into files
- Keep cable/job results separated for fast customer report generation
- Access to files and results allows for quick and easy retest of fibers

© 2002-2012, AFL, all rights reserved. MLP5-30-2000 Revision E, 2012-07-02
Specifications are subject to change without notice.

Test and Inspection

NOYES[®] Upload test data files to PC via USB to utilize powerful data management and reporting tool – TRM[®]

File Naming and Data Management Editor

- Manage job information (Ends, Cable ID, Comments, and Operators) to meet documentation specifications in reports
- Create bi-directional results
- Combine results from multiple OPMs to create a complete job report
- Automatic backup of data

Create Certification Results to Industry Standards (TIA/ISO/EN and applications)

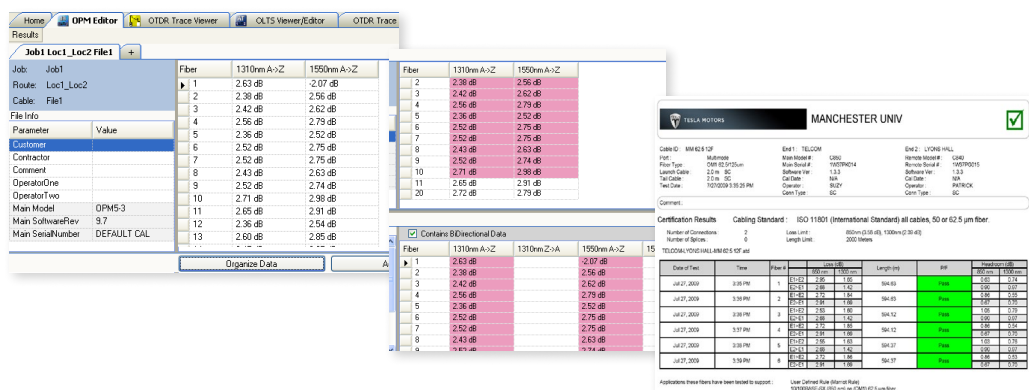
- Apply standards-based rules to loss results
- Generate Pass/Fail information for each fiber
- Demonstrate compliance to industry standards

Customized Reports

- Create professional personalized reports with company logos
- Reports meet accepted industry documentation standards
- Save common report options for quick generation of future reports
- Recall previously stored settings to save time generating reports for repeat customers
- Create certification reports showing fiber Pass/Fail results based on customer/consultant specifications, Industry Standard, and Industry Applications
- Show headroom values for the primary rule (typically the industry standard)
- Use PC analysis to verify if previously measured fibers (tested with NOYES loss test equipment) meet loss requirements of Standards and Rules

Superior Customer Support

- Dedicated customer service, technical support and field sales available to support customers
- Knowledgeable timely technical support and customer service



The screenshot displays the NOYES TRM software interface. On the left, a 'Job1 Loc1_Loc2 File1' window shows a table of test results for fibers 1 through 13, with columns for 1310nm A-Z and 1550nm A-Z loss values. A 'Parameters' table lists job details like 'Customer', 'Contractor', and 'Operator'. Below this is a 'Certification Results' window for 'MANCHESTER UNIV', showing a table of fiber loss results with columns for Date of Test, Time, Fiber, Loss (dB), Length (m), and Pass/Fail status. The certification window also includes a 'Cabling Standard' section and a 'Comments' field.

© 2002-2012, AFL, all rights reserved. MLP5-30-2000 Revision E, 2012-07-02
Specifications are subject to change without notice.

Test and Inspection

NOYES®

MLP5-2 Multimode Test Kit with Wave ID, Set Reference and Data Storage

OPM5-2D Specifications ^a

OPTICAL	OPM5-2D
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 ^b	±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)

OLS1-Dual Specifications ^a

OPTICAL	OLS1-DUAL (SINGLE PORT)	
Wavelength	850 ±30 nm	1300 +50/-10 nm
Emitter Type	LED, Class I 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 ^c	
Output Stability	±0.1 dB over 8 hours (after 5-minute warm-up)	
Fiber Size	62.5 µm ^d	
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)	

Notes:

- All specifications valid at 25°C unless otherwise specified.
- Accuracy measured at 25°C and -10 dBm per N.I.S.T. standards.
- 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.



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.

INCLUDES	AFL NO.
OLS1-Dual optical light source, OPM5-2D optical power meter, AA batteries, protective rubber boots, adapter cap, USB cable, Windows® compatible software, 50 and 62.5 µm mandrels and carry case.	MLP5-2

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).

MODEL	2 YR CAL PLAN	2 YR CAL PLUS PLAN
	AFL NO.	AFL NO.
MLP5-2	CAL2-00-MLP5-2	CAL2-01-MLP5-2