



## MLP 4-2 multimode test kit with Wave ID and set reference

The MLP 4-2 test kit combines the OPM 4-2D optical power meter and OLS 1-Dual LED light source and is ideally suited for testing multimode fiber optic networks.

The OLS 1-Dual features 850 nm 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. The LED output is stabilized to ensure accurate test results per current TIA/EIA requirements. This light source offers 3 modes of operation: Dual wavelengths sending ID, single wavelength sending ID, and CW. [Active Output], [Battery], and [External Power] indicators identify the currently enabled operating mode, battery charge status, and external power presence. The output port is equipped with a removable SC (FC & ST available) adapter to allow the output connector to be inspected and cleaned.

The OPM 4-2D offers Wave ID, automatic wavelength identification and switching, when used with the OLS 1-Dual. Multiple test Tone detection is provided for fiber identification. The OPM 4-2D stores optical references for each calibrated wavelength. An easy to read Dual Wavelength LCD display with Backlight shows measured power [dBm or  $\mu$ W] or insertion loss [dB], calibrated wavelengths, tone signal [Hz], wavelength ID, and the battery charge status.

In addition to being powered by two AA alkaline, the OPM 4-2D or OLS 1-Dual can be powered by optional AC adapter and/or rechargeable NiMH battery pack.

The OPM 4-2D optical input port accepts Noyes thread-on style adapter caps. Adapter caps are required for operation and must be ordered separately.

The OPM 4-2D and OLS 1-Dual are fully N.I.S.T. traceable.

### Features

- Rugged, handheld, lightweight
- Designed for field use
- Certify multimode fiber links per TIA/EIA standards
- Wave ID - automatic wavelength identification and switching
- Dual Wave ID, single Wave ID, and CW
- Large LCD with Backlight
- Power measurements in dBm or  $\mu$ W; insertion loss in dB
- Reference power level storage
- AA alkaline, optional rechargeable NiMH battery pack or AC adapter
- Low battery indicator
- Free 50  $\mu$ m and 62.5  $\mu$ m mandrels
- Cost-effective, easy to use
- N.I.S.T traceable

### Ordering Information

| Model   | Includes   |
|---------|--|
| MLP 4-2 | OLS 1-Dual optical light source, OPM 4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 $\mu$ m mandrels, user's guide, and carry case. |

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 Telecommunications.



*continued on the next page*

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### OLS 1-Dual specifications

| Optical                     | OLS 1-Dual (single port)                      |                 |
|-----------------------------|---|-----------------|
| Output wavelength           | 850 ±30 nm                                    | 1300 +50/-10 nm |
| Spectral width (typ) (FWHM) | 40 nm   | 120 nm          |
| Output power                | >-20 dBm*                                     |                 |
| Fiber size                  | 62.5 µm**                                     |                 |
| Output connector            | SC (FC & ST available)                        |                 |
| Emitter classification      | Class 1 (IEC 60825 - 1)                       |                 |
| Stability                   | ± 0.1 dB over 8 hours (after 5 min. warm-up)  |                 |
| <b>General</b>              |   |                 |
| Power                       | 2 x AA batteries, optional NiMH or AC adapter |                 |
| Battery life (2 x AA)       | Typical 30 hours, Minimum 20 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)            | 5.5 x 3.2 x 1.5 in (14.0 x 8.1 x 3.8 cm)      |                 |
| Weight                      | 0.65 lb (.29 kg)                              |                 |

\* 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.

All specifications at 25°C

### OPM 4-2D specifications

| Optical                | OPM 4-2D   |
|------------------------|--|
| Calibrated wavelengths | 850, 1300, 1310, 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 *             | ± 0.25 dB  |
| Resolution             | 0.01 dB  |
| Measurement units      | dB, dBm, µW  |
| <b>General</b>         |  |
| Power                  | 2 x AA batteries, optional NiMH                                |
| Battery life (2 x AA)  | 300 hours with backlight [Off]<br>20 hours with backlight [On] |
| 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)       | 5.5 x 3.2 x 1.5 in (14.0 x 8.1 x 3.8 cm)                       |
| Weight                 | 0.58 lb (0.26 kg)  |

\* Accuracy measured at 25°C and -10 dBm per N.I.S.T. standards.

All specifications at 25°C

