

KI 6102 Series

Optical PON Power Meter

Optical Communications Test Applications

- FTTX PON acceptance test
- FTTX PON fault isolation



Revision 12

The KI 6102 series Optical PON Power Meter is used for testing FTTX PON fiber optic communications systems.

Common uses include live acceptance testing during service turn-up, and fault isolation during subsequent maintenance, particularly when an ONT has failed.

It is connected in-line on a live system, and simultaneously displays the power of all 3 operational PON wavelengths, including the return signal power.

Features

- Compact, rugged & light weight
- For BPON/EPON/GPON testing
- Large, sunlight readable LCD display
- In-line testing 1310, 1490, 1550 nm
- 1310 nm Burst Mode testing
- Pass/Fail displays
- Internal memory for 99 3- λ tests with timestamp
- Saved test data downloadable to PC using Data Management Software
- Real-time clock for test data timestamp
- Power saving design with backlight
- 1 year warranty
- 3 years calibration cycle

KI 6102 Series – Optical PON Power Meter

The KI 6102 handheld in-line PON Power Meter is ideal for measuring power in a typical live BPON/EPON/GPON FTTX communication link.

This feature rich instrument makes for easy pass/fail results storage and reporting. Stable readings inspire user confidence.

The clear sunlight readable and backlit display is combined with simple operation, to ensure good quality testing.

The instrument features rugged construction, moisture resistance, rubber holster and captive connector dust caps.

Operational savings come from a 3-year recalibration cycle and fast & simple operation.

The meter displays dBm, W and dB. The resolution is 0.01dB. A separate reference for each λ can be stored.

Pass/Fail display is available, and Pass/Fail value is user definable.

The saved 3- λ test data with timestamp can be downloaded from the unit onto PC via USB connection using the Data Management Software.

OPTICAL SPECIFICATIONS

| Parameters | 1310nm (upstream) | 1490nm (downstream) | 1550nm (downstream) |
|-------------------------------|----------------------|----------------------|----------------------|
| Passband ¹ (nm) | 1260 nm ~ 1360 | 1470 nm ~ 1505 | 1535 nm ~ 1570 |
| Measurement range (dBm) | -40 ~ +10 | -45~ +10 | -45 ~ +23 |
| Damage level (dBm) | > +10 | > +10 | > +23 |
| Isolation (dB) | > 40 (@1490/1550 nm) | > 40 (@1310/1550 nm) | > 40 (@1310/1490 nm) |
| Uncertainty ² (dB) | | 0.5 | |
| Polarization (dB) | | < 0.25 | |
| Linearity (dB) | | 0.1 | |
| Insertion Loss (dB) | | < 1.5 | |
| ORL (dB) | | 50 | |

Note 1: FWHM

Note 2: At calibration conditions

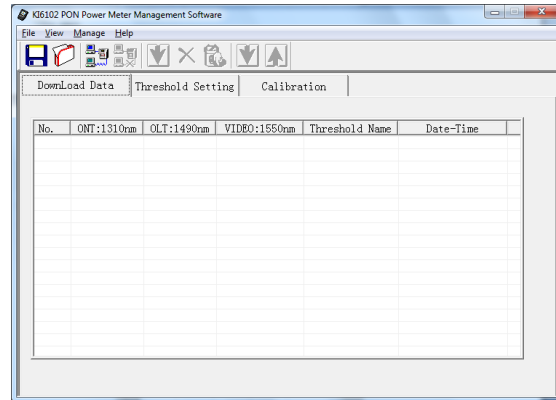
GENERAL SPECIFICATIONS

| Parameters | Value |
|--|---|
| Fiber type / Connector interface | SM 9/125 μ m / Fixed SC-PC or SC-APC |
| Detector type | InGaAs |
| Display | 44 x 57 mm (1.73 x 2.24 "), back lit sunlight readable LCD |
| Show Results | dBm / W / dB, pass / fail |
| Display Resolution | 0.01 dB |
| Auto off function | Selectable auto-off |
| Internal memory capacity | 99 3- λ test with timestamp |
| Battery type / life (continuous operation) | 4x AA non-rechargeable Alkaline battery (not included) / 18 hrs |
| Instrument case | 1.2 m drop tested |
| Operate / storage temperature | -10 ~ +60 °C / -25 ~ +70 °C |
| Relative humidity | 95% |
| Size / Weight | 200 x 90 x 43 mm (7.87 x 3.54 x 1.69") / 0.4 kg (0.9 lb.) |
| Recommended calibration cycle | 3 years |
| Warranty | 1 year |

Technical data is subject to change without notice as part of our program of continuous improvements.

KINGFISHER PON POWER METER SOFTWARE

- Download testing data in the meter to a PC via USB
- Download/Upload threshold settings to the meter
- Calibration



ORDERING INFORMATION

| Description | Part number |
|--|---------------|
| Instrument, In-line PON Power Meter AA Battery, SC/APC | KI 6102AA-APC |

Please enquire for nonstandard SC/PC connector.

STANDARD ACCESSORIES

| Description | Quantity |
|---|----------|
| SC/APC-SC/APC or SC/PC-SC/PC test cord | 1 |
| USB cable (A-B[mini] type) | 1 |
| CD (Data Management Software & manuals) | 1 |
| Cleaning cotton stick pack | 1 |
| Soft carry pouch | 1 |
| User manual | 1 |
| QA certificate (ISO9001 compliant) | 1 |

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