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

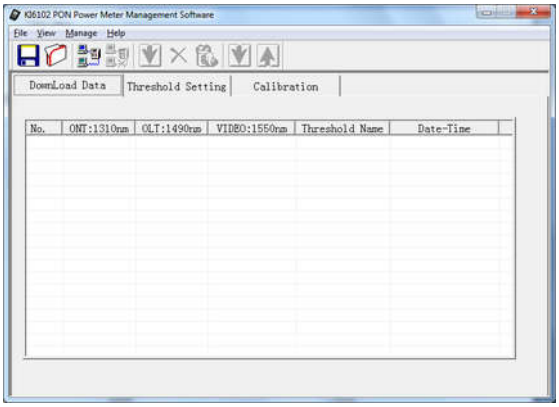
GENERAL SPECIFICATIONS

Parameters	Value
Fiber type / Connector interface	SM 9/125 µm / 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

AUTHORIZED DEALER

by KINGFISHER a TEMPO company

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