KI 6102 Hand Held PON Power Meter

The KI 6102 series Optical PON Power Meter is used for testing FTTX PON fibre 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.

Applications

- FTTX PON acceptance test
- FTTX PON fault isolation

KINGFISHER INTERNATIONAL

Features & Benefits

- 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 time-stamp
- Power saving design with back-light
- 1 year warranty
- 3 year calibration cycle

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 re-calibration 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-λTest data with timestamp can be downloaded from the unit onto PC via USB connection using the Data Management Software.

Technical Specifications

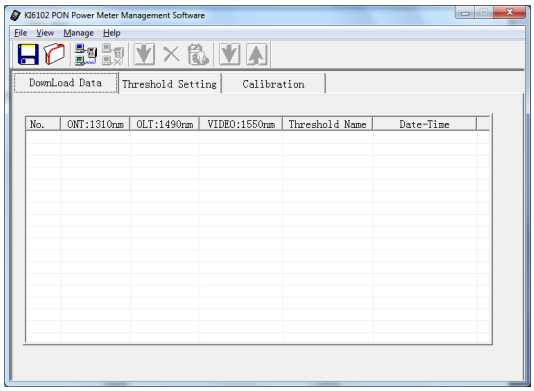
This class of instrument is for testing PON transmission power. Alternatively for loss testing, it requires a non-standard KI2000 series test source with specific CWDM compliant lasers.

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

Note 1: FWHM
Note 2: At calibration conditions

Kingfisher PON Power Meter Software

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



For further information:
www.fibreoptic.com.au
+61 3 9757 3000

FOS
Fibre Optic Systems

General Specifications

Part number	KI 6102AA-APC
Description	Instrument, In-line PON power meter, SC/APC
Battery life	18 hours typical
Power	4 Alkaline AA cells
Size WxHxD (mm)	90 x 200 x 43
Unit weight (kg)	0.40
LCD size (mm)	44 x 57 (backlit sunlight readable)
Physical resistance	1.2m drop test
Dust cap	Captive
Memory	99 three λ tests with timestamp in internal memory
Operating temp (°C)	-15 to 60
Storage temp (°C)	-25 to 70
Relative humidity (%)	0 ~ 95
Fibre type	SM 9/125 um
Connector interface	Fixed SC/APC (SC/UPC option available)
Detector type	InGaAs
Results shown	dBm/W/dB, pass/fail
Display resolution (dB)	0.01
Auto off function	Selectable
Calibration cycle / warranty period (years)	3 / 1
Standard accessories	4 AA batteries, user manual, soft carry pouch, patch lead, CD (software & manuals), USB cable, cleaning cotton stick pack

Please enquire for nonstandard SC/UPC connector variants.