

KI 6106 Series Optical 10G/XG PON Power Meter

Optical Communications Test Applications

FTTX PON acceptance test

FTTX PON fault isolation

- The KI 6106 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 4 operational PON wavelengths, including the return signal power.
- The KI 6106 handheld in-line 10G/XG 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 4 λ test data with timestamp can be downloaded from the unit onto PC via USB connection using the Data Management Software.

Features & Benefits

- Compact, rugged & light weight
- For BPON/EPON/GPON/XGPON/XGSPON testing
- Large, sunlight readable LCD display
- In-line testing 1270, 1310, 1490, 1577 nm
- 1310, 1270 nm Burst Mode testing
- Pass/Fail displays
- Internal memory for 99 records of 4 λ tests with timestamp
- Saved test data downloadable to PC using Data Management Software
- Real-time clock for test data timestamp
- Backlit display
- 1-year warranty
- 3 years calibration cycle



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OPTICAL SPECIFICATIONS

Parameters	1270 nm (upstream)	1310 nm (upstream)	1490 nm (downstream)	1577 nm (downstream)
Passband ¹ (nm)	1260 ~ 1280	1290 ~ 1330	1470 ~ 1505	1570 ~1585
Measurement range (dBm)	-30 ~ 10	-30 ~ 10	-45 ~ 10	-45 ~ 10
Damage level (dBm)	> 10	> 10	> 10	> 10
Isolation (dB)	> 30 (@ 1310 nm) > 40 (@ 1490, 1577 nm)	> 30 (@ 1270 nm) > 40 (@ 1490, 1577 nm)	> 40 (@ 1270, 1310, 1577 nm)	> 40 (@ 1270, 1310, 1490 nm)
Uncertainty ² (dB)		0.5		
PDL (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

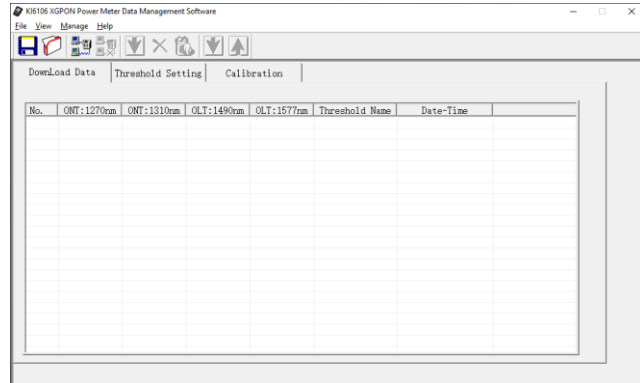
Parameters	Value
Fiber type / Connector interface	SM 9/125 μm / Fixed SC-PC or SC-APC
Detector type	InGaAs
Display	44 x 57 mm (1.73 x 2.24 "), back lit sunlight readable LCD
Show Results	dBm / W / dB, pass / fail
Display Resolution	0.01 dB
Auto off function	Selectable auto-off
Internal memory capacity	99 records of 4λ test with timestamp
Battery type / life (continuous operation)	7.4V 1000mAH rechargeable Lithium battery / 10 hrs
Power adaptor/charger	Input: 100~240V, 50/60Hz 0.3 A; Output: 8.4V, 0.5A; Connector: 1.3(ID) x 3.5(OD) x 9.5 (L) mm, ID=positive, OD=negative
Instrument case	1.2 m drop tested
Operate / storage temperature	-10 ~ 50 °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.

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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 10G/XG PON Power Meter, SC/APC	KI 6106-APC
Please enquire for nonstandard SC/PC connector.	
The instrument comes with an external power supply/charger of US AC plug type. If require, order suitable AC plug adapter from OPTIONAL ACCESSORIES section below.	

STANDARD ACCESSORIES

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

OPTIONAL ACCESSORIES

Description	Quantity
Option, AC adaptor plug , US-to-UK	OPT093
Option, AC adaptor plug , US-to-AUS	OPT094
Option, AC adaptor plug , US-to-EUR	OPT095