T6106 Series

Optical 10G/XG PON Power Meter

Optical Communications Test Applications

- FTTX PON acceptance test
- FTTX PON fault isolation

Revision 3

The T6106 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.

Features

- 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 4λ 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

Distribution in the UK & Ireland

Lambda

Characterisation, Measurement & Analysis

Lambda Photometrics Limited
Lambda House Batford Mill
Harpenden Herts AL5 5BZ
United Kingdom
E: info@lambdaphoto.co.uk
W: www.lambdaphoto.co.uk
T: +44 (0)1582 764334
F: +44 (0)1582 712084

T6106 Series – Optical 10G/XG PON Power Meter

The T6106 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 4λ test data with timestamp can be downloaded from the unit onto PC via USB connection using the Data Management Software.

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

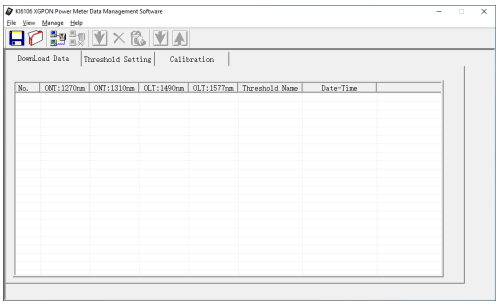
GENERAL SPECIFICATIONS

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;* US stype plug Output: *8.4V, 0.5A; 1.3(ID) x 3.5(OD) x 9.5 (L) mm connector, 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.

TEMPO 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	T6106-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 with US style plug	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

AUTHORIZED DEALER

KINGFISHER a TEMPO company

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United Kingdom
E: info@lambdaphoto.co.uk
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