

# T6106 Series

OPTICAL 1G/10G PON POWER METER

TESTING | TROUBLESHOOTING | ACCURACY

#### **OPTICAL COMMUNICATIONS TEST APPLICATIONS:**

- FTTX PON ACCEPTANCE TEST
- FTTX PON FAULT ISOLATION

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.

#### **Product Features:**

- Compact, rugged & light weight
- For BPON/EPON/GPON/XGPON/XGSPON testing
- Perform in circuit and terminated measurements
- 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  $4\lambda$  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



### **ORDERING INFORMATION:**

PART NUMBER	DESCRIPTION
T6106 -APC	Optical 1G/10G 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. It can also be used to perform terminated measurements. i.e., using ONT port to measure burst power at 1270-1310 nm and/or, OLT port to measure power at 1490 -1577 nm independently.

## **OPTICAL SPECIFICATIONS:**

Parameters	1270 nm (upstream)	1310 nm (upstream)	1490 nm (downstream)	1577 nm (downstream)
Passband¹ (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)
Uncertainty² (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		
Power adaptor/charger	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		
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Technical data is subject to change without notice as part of our program of continuous improvements.

