PPM-50/51 PON Power Meter

Product Overview

PPM-50 PON Power Meter can perform in-service testing of all PON signals (1310/1490/1550nm) at any location on the network featuring pass-through design, burst mode and Pass/Fail/Warning assessment function, which can greatly help you evaluate PON signals transmission quality.
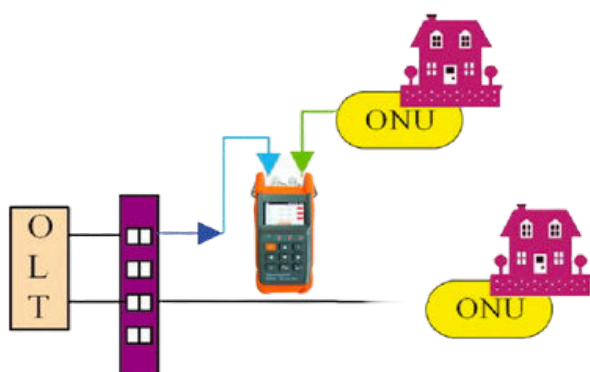
Features

- Specially designed for FTTx/PON (B/E/G) applications
- Easy operation
- Simultaneous Triple-play PON signals measurement: 1310/1490/1550nm (Voice/Data/Video)
- Pass-through test: Applicable anywhere on PON
- Burst mode 1310nm upstream signal detection
- User-defined thresholds on PPM-50 unit
- Pass/Warning/Fail assessment on PPM-50 unit
- Cable/Fiber ID editing
- CSV file format
- Colour TFT, readable under sunlight
- Compact design

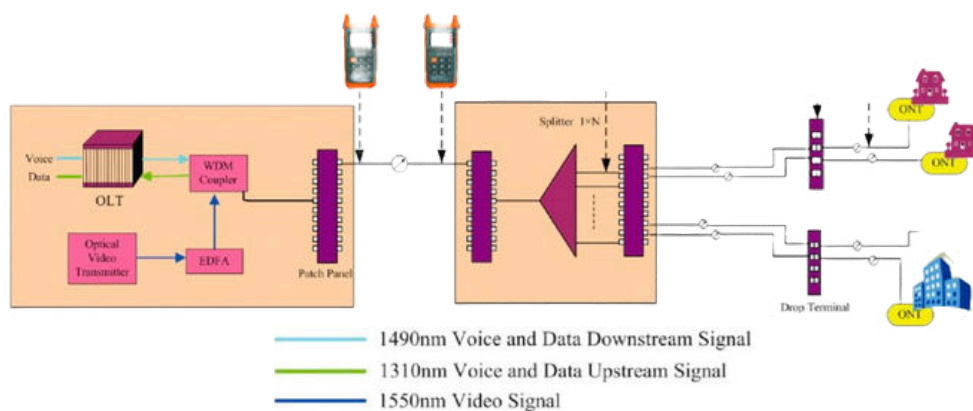### Pass-through Simultaneous Measurement & Display of All PON Signals

PPM-50 works as a pass-through device, which can be connected anywhere between OLT and ONU. A small percentage of optical signals are extracted for use by PPM-50 detectors. This approach enables all wavelengths to be used simultaneously and introduces no interruption to network services.

- Pass-through connection and simultaneous measurement of all PON signals
- Filtered detectors for individual signal measurement at each wavelength
- Upstream signal burst mode detection at 1310nm

➤ Flexible Measurement on PON

- 1490nm Voice and Data Downstream Signal
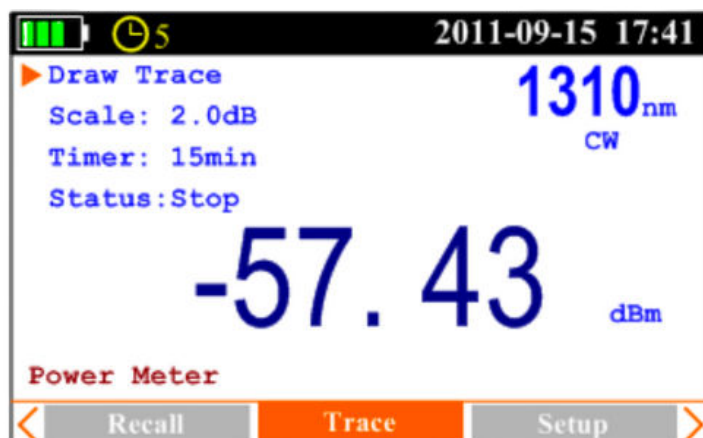- 1310nm Voice and Data Upstream Signal
- 1550nm Video Signal

➤ User-defined Threshold Sets

PPM-50 enables threshold setting—each set consists of three wavelengths (1310, 1490 & 1550nm) with their Pass, Fail and Warning thresholds. These values can be configured for easy assessment of fibres, components and test points on the network.

➤ Optical Power Meter Function

The PPM-51 enables more than seven wavelengths of calibration. Compatible with the digital encryption protocols of SLS-50, OPM-50 can automatically identify the wavelength of the optical signals transmitted from SLS-50 and switch to the corresponding test mode, which greatly reduces the workload at both ends and avoids potential errors. It can receive the power parameters of the digital-encrypted signal transmitted from SLS-50 as a reference for precise link loss measurement even if the two units are far apart.

Specifications

Model	PPM-50			PPM-51	
PON Power Meter					
Calibrated Wavelength	1310	1490	1550	1490	1550
Measurement Range(dBm)	-40 ~+10	-40 ~ +12	-40 ~+20	-40 ~+12	-40 ~ +20
Spectral Passband (nm)	1310± 50	1490± 15	1550± 10	1490± 15	1550± 10

Power Uncertainty (dB)	≤ 0.5dB	
Accuracy (dB)	0.01dB	
Insertion Loss (dB)	≤ 1.5dB	
Data Storage	>2000 records	PPM/OPM all >2000 records
OPM Function (only with PPM-51)		
Model	PPM-51A	PPM-51B
Calibrated Wavelength	850,1300,1310,1490,1550,1625,1650nm	
Power Range (dBm)	-70 ~ +10	-50 ~+27
Detector Type	InGaAs	
Accuracy	±0.25dB @ 25°C& -10dBm (±0.5dB@850nm)	
Resolution (dB)	0.01	
MOD Identification	270, 1K, 2K Hz	
Auto Wavelength Identification	Yes (With SLS-50)	
Display	TFT	
Connector	FC/PC (Interchangeable SC, ST)	
Data Storage	>2000 records	
Data Interface	USB	
Power Supply	Rechargeable lithium battery (1050mAh) / AC adapter	
Battery Life	≥6 hours	
Operating Temperature	-10℃ to 50℃	
Storage Temperature	-20℃ to 70℃	
Relative Humidity	0 to 95% (non-condensing)	
Weight	345g	

* Specifications subject to change without notice

Note:
(1) Burst mode measurement range at 1310 nm: -30 ~ +10dBm
(2) Other wavelengths are open for customisation;
(3) For Model A at 850nm, the lower limit of measurement range is -60 dBm (Model A) / -40dBm (Model B);

Ordering Information

Standard package includes:
PON Power Meter Lithium battery, Rubber boot, Data transfer cable (USB), PC Software CD, AC adapter, Toolkit for soft bag, Warranty card, CE certificate, Certificate of calibration, User manual.