Product Specification

Handheld Instruments

PON OPTICAL POWER METER & VFL

ATPPM32013 series

Overview

The ATPPM32013A Passive Optical Network (PON) tester measures voice, video and data signals in BPON, GPON and EPON networks. This tester measures the three optical wavelengths simultaneously (1490nm, 1550nm & 1310nm) by measuring the refraction rate of the upstream, 1310nm wavelength. The ATPPM32013A by aTrian is a welcome and cost-effective addition to every PON network technician's toolkit.

Key Features

- Connectors types: SC, FC and ST, universal 2.5
- A test measurement device for voice, video and data signals in passive optical networks
- Suitable for BPON, GPON and EPON networks
- Simultaneous measurement of the three optical wavelengths: 1490nm, 1550nm & 1310nm
- Measures the refraction rate of the 1310nm upstream wavelength (from ONT)
- Includes USB port and software for computer connection. Software features include:
  - Measurement thresholds: allows for up to 10 different threshold groups
  - Transfer of test measurement data
  - Optical wavelength calibration
  - Stores up to 1000 measurements for file transfer
- Onboard Optical Power Meter (OPM) and Visual Fault Locator (VFL)
- 3 leds indicate optical signal conditions: pass, warning, fail
- Auto shut-off (enable/disable)
- Lightweight, low-volume, ergonomic design with high-sensitivity keypad

Technical Specifications

Group	Parameters	Value
Temperature Range	Storage Temperature	-25°C ~ +70°C
	Operating Temperature	-10°C ~ +60°C
Mechanical Characteristics	Weight	650g
	Dimensions	235 x 160 x 80 mm
Battery	Operating Voltage	3.3 VDC ~ 5.5 VDC
	Power Supply	3 x AA Batteries (1.5V)
	Battery Life @ PON	90 hours
	Battery Life @ OPM	100 hours
	Battery Life @ VFL	50 hours
Instrument Characteristics	Detector Type	InGaAs
	Optical Connectors	FC/SC/ST/Universal 2.5
	Fiber Optic Type	SMF 9/125μm
	Measurement Units	dB/dBm/xW
	Automatic Shut-Off	After 10 min
	Included in Packaging	PON+OPM+VFL, Manual and Carrying Case

PON Traffic Parameters

Group	Parameters	Value
1310 nm Upstream Traffic Measurement (Voice, IP Video & Data from ONT)	Pass Zone	1260nm ~ 1360nm
	Measurement Range (dBm)	-35dBm ~ +10dBm
	Max Output Power	15dBm
	Isolation@1310/1490nm (dB)	>40dB
	Burst Mode Measurement Error	<±0.5dB
1490nm Downstream Traffic Measurement (Voice, IP Video & Data from OLT)	Pass Zone	1470nm ~ 1505nm
	Measurement Range (dBm)	-35dBm ~ +10dBm
	Max Output Power	15dBm
	Isolation@1310/1490nm (dB)	>40dB
1550nm Downstream Traffic Measurement (RF Video Overlay)	Pass Zone	1535nm ~ 1570nm
	Measurement Range (dBm)	-35dBm ~ +10dBm
	Max Output Power	15dBm
	Isolation@1550nm (dB)	>40dB
Measurement Precision	Connatural uncertainty(dB)	±0.5dB

	Linearity(dB)	±0.1dB
	Passing through insertion Loss(dB)	<1.5dB

Optical Power Meter (OPM) Parameters

Parameters	Value
Measurement Range (dBm)	-70dBm ~ +6dBm
Connatural UncertaintydB)	±0.5dB
Linearity (dB)	±0.1dB
Resolution (dB)	0.01dB
Wavelength Calibration	1310/1490/1550/1625nm

Visual Fault Locator (VFL) Parameters

Parameters	Value
Optical Power	> 0.5 mW
Wavelength	650nm
Optical Connector	FC/SC/ST/Universal 2.5
Type of Optical Fiber	Singlemode (SM) / Multimode (MM)

Ordering Information

Part Number	Description
ATPPM32013A	PON+OPM+VFL Optical Instrument

Warranty

ONE year of limited warranty for products sold directly by Atrian Technologies, unless special agreements have been set. Warranty period start from the ship date and will be only valid for the original customer who bought the product. If you have purchased the product from a reseller you must contact him directly. RMA Form and full warranty details are available on our website.