

# FX80

## PON Optical Power Meter



In-Line optical power meter geared for FTTx/PON service activation. Simultaneously measures downstream signals to the ONT and upstream signal to the OLT.

### Key Features

- FTTx power meter for B/E/G-PON applications
- ONU and OLT test ports with pass-through design
- Fixed SC/APC Interface for ONU and OLT test ports
- Concurrent measurement and display of Upstream and Downstream signals
- 1310 nm Upstream CW/Burst signal support
- 1490/1550 nm Downstream signal support
- Programmable thresholds with Pass/Fail indication
- Optional broadband power meter with universal adaptors
- Non-volatile storage for > 930 measurements
- Wired transfer of stored results to a PC via micro USB
- PC software for data transfer, management and report generation
- Upload of stored results to VeEX R-Server workforce management system or Fiberizer Cloud
- High contrast LCD - visible outdoors, backlight for indoor or low light conditions
- Splash and dust resistant keypad and chassis design

### Key Specifications

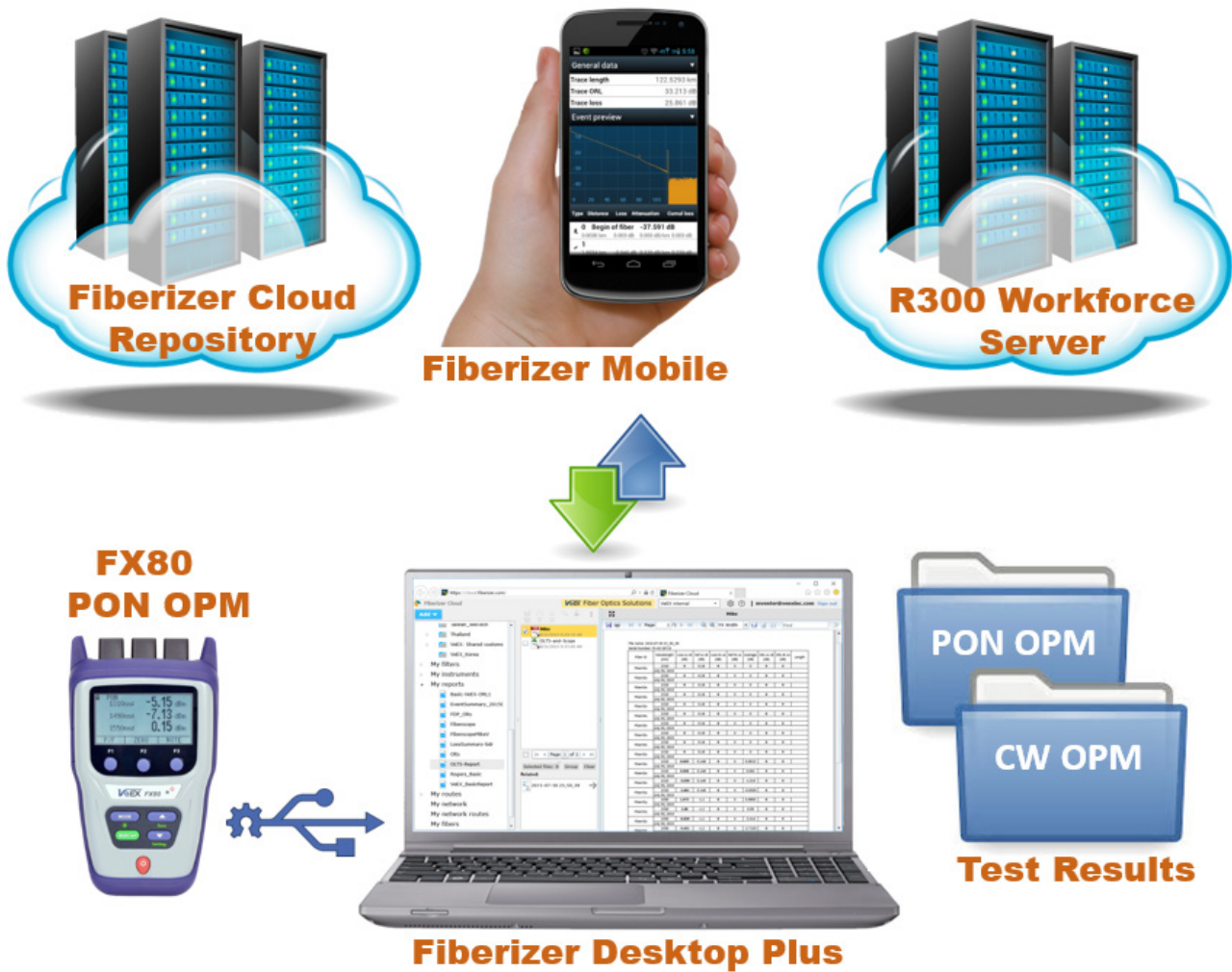
- Wavelength-selective level measurements for verifying B/E/GPON networks according to ITU-T G.983/4 and IEEE 802.3ah recommendations
- Calibrated wavelengths: 1310/1490/1550 nm
- FTTx PON Power Measurement range (Passthrough):
  - 40 to +10 dBm (1310 nm)
  - 40 to +12 dBm (1490 nm)
  - 40 to +25 dBm (1550 nm)
- Burst measurement range @ 1310 nm: -30 to +10 dBm
- Pass Through Insertion Loss:  $\leq 1.5$  dB
- BB-OPM Absolute Accuracy:  $\pm 0.5$  dB
- Linearity:  $\pm 0.2$  dB @ 1550 nm ( $\geq -40$  dBm)
- Optical Return Loss @ 1550 nm:  $\geq 55$  dB
- Display resolution: 0.01 dB
- Broadband (CW) measurement range:
  - Standard (PM1) version: -65 to +10 dBm
  - High (PM2) version: -50 to +25 dBm
- Communication I/F: micro USB
- Battery: Built-in, rechargeable Li-Polymer
- Battery operating time (without backlight):
  - Broadband OPM mode: > 80 hours
  - FTTx PON mode: > 40 hours

## Fiberizer™ Software

**Fiberizer Software** is a family of fiber software suites that dramatically increases technician efficiency, workflow integration and process compliance.

**Fiberizer Cloud** lets you store, analyze and access all your fiber optic test data in a single online repository. This unique Enterprise or Cloud based solution provides superior centralized test data management – plus being a full online web service, technicians can work or access data from almost any location, at any time.

**Fiberizer Desktop-Plus** software enables comprehensive test data analysis and report generation on Windows compatible PC platforms. The software also supports upload of test data to Fiberizer Cloud or VeSion R300 server for offsite record keeping and report generation.



## VeSion R300 Productivity Server

A software application is specifically designed for medium-to-large service providers facing the enormous challenge of managing and coordinating hundreds of installations per day, collecting the field test results for billing/record purposes and having to maintain a large inventory of test sets. When used in conjunction with Fiberizer™ Mobile, the back-office server application becomes a powerful tool to reduce customer call-backs and associated truck rolls, maximizing workforce efficiency and lowering operational costs.

## Optical Specifications<sup>1</sup>

PON Power Meter	Specification
Calibrated wavelengths (nm)	1310/1490/1550
Number of test ports	2 minimum (ONU, OLT)
Continuous data measurement range (dBm)	
-1310 nm	-40 to +10
-1490 nm	-40 to +12
-1550 nm	-40 to +25
Burst data measurement range (dBm) – OLT to ONT	
- 1310 nm	-30 to +10
Spectral Passband (nm) <sup>2</sup>	
-1310 nm	1260 to 1360
-1490 nm	1470 to 1505
-1550 nm	1535 to 1570
Power measurement accuracy, (dB) <sup>3,4,5</sup>	± 0.5
Pass-Through Insertion Loss, (dB) <sup>4</sup>	≤ 1.5
Linearity, (dB)	± 0.1
Display Resolution (dB)	0.01
Results	dBm, W, dB, Pass/Fail
Interface	Fixed APC
Connector Type	SC
Internal memory capacity	> 930 results with timestamp
Broadband Power Meter (Optional)	
Wavelength range (nm)	850 to 1650
Calibrated wavelengths (nm)	1310/1490/1550/1590/1610/1625/1650
Power measurement range (dBm)	
-Standard (PM1)	-65 to +10
-High (PM2)	-50 to +25
Power measurement accuracy %, (dB)	± 5, (0.22)
Tone detection (Hz, kHz)	270, 1 KHz, 2 KHz
Wave ID (Auto)	Compatible with VeEX Light source
Optical adaptors (interchangeable)	SC, FC, LC, Universal 1.25 & 2.5 mm

### Notes:

1. At room temperature
2. FWHM (typical)
3. Calibration conditions, -10 dBm
4. Typical value
5. Calibrated wavelengths
6. APC connectors

## General Specifications

Size:	129 x 61 x 38 mm (H x W x D)	PC connection:	Micro USB, data transfer via PC software
Weight:	< 400 g (< 0.7 lbs.)	Display:	TFT LCD with backlight
Construction:	Rugged, Polycarbonate chassis, 1 meter drop tested	Operating Temp:	-10 °C to +50 °C
Battery:	Built-in Rechargeable Li-Polymer	Storage Temp:	-20 °C to +70 °C
Power Supply:	Micro USB interface, 5 VDC charger	Humidity:	0% to 95%, non-condensing



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