



# FX87

## DWDM Tunable Laser Source



Tunable C-band laser source is used to test, install and commission multi-wavelength DWDM networks. Verify wavelength routing and troubleshoot passive DWDM network elements. Optimized for Fiber Deep, Metro and Core DWDM test applications.

### Key Features

- Affordable, hand held tunable DWDM laser source
- Fast boot-up time and laser stabilization (< 5 seconds)
- Full C-band tuning (> 80 channels @ 50 GHz spacing)
- Selectable Channel spacing: 50, 100 & 200 GHz
- Source modulation - 270Hz, 330Hz, 1kHz & 2kHz
- Broadband Optical Power Meter (OPM) option
- WaveID - OPM automatically identifies each wavelength transmitted by the tunable source or companion device
- Monochrome LCM, 128 x 64 pixels, LED backlight display
- Li-Polymer rechargeable battery, > 10 hours operation
- Non-volatile storage for > 900 measurements
- Wired transfer of saved OPM results to a PC via USB cable
- Wireless transfer of saved OPM results to a PC via Bluetooth (optional)
- LT-Sync PC software for OPM result transfer and basic report generation.
- Fiberizer Desktop Plus PC software for advanced report generation
- Upload of stored results to VeEX R-Server workforce management system or Fiberizer Cloud via PC software
- Rugged Polycarbonate Case with impact resistant rubber boot, 1 meter drop tested
- Splash and dust resistant keypad

### Key Specifications

#### Tunable Source

- Wavelength Range: 1527.60 to 1566.31 nm
- Frequency Range: 191.40 to 196.25 THz
- 97 Channels
- Minimum channel spacing: 50 GHz (ITU G.694.1 grid)
- Linewidth: 500 kHz
- SMSR: 40 dB minimum
- Built-in wavelength locker (stable to within  $\pm 2.5$  GHz)
- Output Power: + 5 dBm (typ)
- Laser Safety: Class 1M per IEC 60825-1:2014

#### Optical Power Meter (Optional)

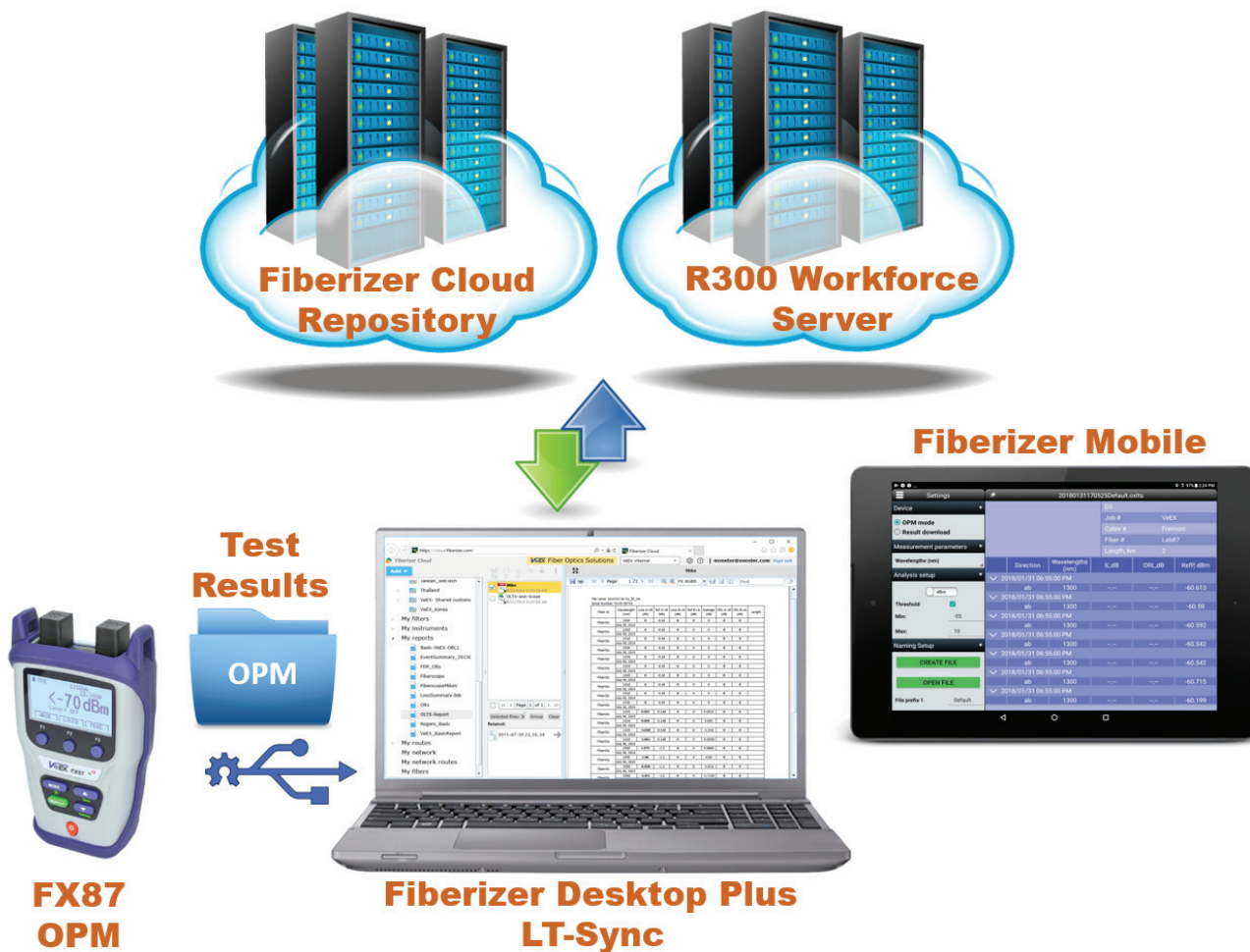
- Accuracy:  $\pm 0.2$  dB (5%)
- WaveID support (using compatible VeEX source)
- Display resolution: 0.01 dB
- Measurement range:
  - Standard (PM1) version: -65 to +10 dBm
  - High (PM2) version: -50 to +25 dBm

## Fiberizer™ Software

**Fiberizer Software** is a family of fiber software suites that dramatically increases technician efficiency, workflow integration and process compliance. LT-Sync software is used to transfer OPM test results from the FX87 to a PC. LT-Sync software also supports upload of test results to Fiberizer Cloud, R300 server or Fiberizer Desktop Plus for post processing and report generation.

**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>

Tunable Laser Source (TLS)	Specification
Wavelength Range (nm)	1527.60 to 1566.31
Frequency Range (THz)	191.40 to 196.25
Frequency Accuracy (GHz)	±2.5
Number of Channels <sup>2</sup>	97
Channel #	14-62
Linewidth (kHz) <sup>3</sup>	500
OSNR (dB) <sup>4</sup>	55
SMSR (dB)	40
Minimum channel spacing (GHz)	50
Internal Wavelength Stabilization (GHz)	±2.5
Output Power (dBm)	+5
Modulation (Hz)	270/330/1000/2000
Laser Safety (IEC 60825-1:2014)	Class 1M
Interface	APC
Connector Type	Fixed SC
Broadband Power Meter (Optional)	
Wavelength range (nm)	850 to 1650
Calibrated wavelengths (regular OPM mode)	850/1310/1490/1550/1590/1610/1625/1650
Calibrated wavelengths (DWDM WaveID)	1530 to 1560 nm in 10 nm steps
Power measurement range (dBm)	
-Standard (PM1)	-65 to +10
-High (PM2)	-50 to +25
Power measurement accuracy %, (dB) <sup>5</sup>	± 5, (0.22)
Tone detection (Hz)	270/330/1000/2000
Wave ID (Auto)	Compatible with VeEX Light source
Optical adaptors (interchangeable)	SC, FC, LC, Universal 1.25 & 2.5 mm

## Notes:

1. At specified operating temperature
2. Consecutive channels at 50 GHz spacing
3. Intrinsic Lorentzian linewidth
4. In a 0.1 nm wide band
5. At calibrated wavelengths



## General Specifications

Size:	164.39 x 100 x 46.93 mm (H x W x D)	PC connection:	Micro USB, data transfer via PC software Bluetooth optional
Weight:	< 400 g (< 0.7 lbs.)	Display:	Monochrome 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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