



# FX86

## CWDM/PON Quad Laser Source



Quad output laser source to verify, install, and commission PON and CWDM networks. Verify wavelength routing and troubleshoot dark PON and CWDM network elements.

### Key Features

- Low cost, hand-held CWDM/PON laser source
- Fast boot-up time and laser stabilization (<5 seconds)
- Supports any four CWDM/GPON/XGS-PON wavelengths
- Any combination of outputs can be activated simultaneously and modulated individually
- Industry standard modulation for use with fiber identifiers
- Output ports equipped with dust and safety protection shutter
- Monochrome LCD, 128x64 pixels, LED backlight display
- Li-polymer rechargeable battery, 25 hours of operation with 4 lasers continuously
- Rugged polycarbonate case with impact resistant rubber boot, 1 meter drop tested
- Splash and dust resistant keypad

### Key Specifications

- Four outputs with any CWDM/GPON/XGS-PON wavelength combination
- CWDM wavelengths per the ITU-T G.694.2 grid
- GPON wavelengths (down/up) per ITU-T G.984.2
- XGS-PON wavelengths (down/up) per ITU-T G.9807.1
- Wavelengths available: 1271, 1291, 1311, 1331, 1351, 1371, 1391, 1411, 1431, 1451, 1471, 1491, 1511, 1531, 1551, 1571, 1577, 1591, 1611 nm
- CWDM channel spacing: 20 nm (ITU G.694.2 grid)
- Wavelength accuracy:  $\pm 3$  nm
- Linewidth:  $\pm 0.5$  nm
- Modulation: 270 Hz, 330 Hz, 1 kHz and 2 kHz
- Optical isolation: 40 dB
- SMSR: 35 dB minimum
- Output power:  $> -1.5$  dBm
- Laser safety: Class 1 per IEC 60825-1:2014

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

Light Source	Specification
Wavelengths (nm)	1271, 1291, 1311, 1331, 1351, 1371, 1391, 1411, 1431, 1451, 1471, 1491, 1511, 1531, 1551, 1571, 1577, 1591, 1611 nm
Wavelength accuracy (nm)	±3
Number of channels <sup>2</sup>	4
Linewidth (nm) <sup>4</sup>	0.5
Optical isolation (dB) <sup>3</sup>	40 (Typical)
SMSR (dB)	35
Minimum channel spacing (GHz)	50
Internal wavelength stabilization (GHz)	± 2.5
Output power (dBm)	>-1.5 dBm
Laser safety (IEC 60825-1:2014)	Class 1
Interface	APC
Connector type	Fixed SC

### Notes:

1. At specified operating temperature
2. Number of lasers
3. In a 0.1 nm wide band
4. At -3 dB bandwidth



## General Specifications

Size:	164.39 x 100 x 46.93 (6.47" x 3.94" x 1.85")	Display:	Monochrome LCM with backlight
Weight:	0.42 kg (0.93 lb)	Operating Temp:	-10 °C to +50 °C
Construction:	Rugged, Polycarbonate chassis, 1 meter drop tested	Storage Temp:	-20 °C to +70 °C
Battery:	Built-in Rechargeable Li-Polymer	Humidity:	0% to 95%, non-condensing
Power Supply:	Micro USB interface, 5 VDC charger		



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