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Data Sheet

August 2, 2026

ILX LIGHTWAVE

ILX Lightwave FOS-79800E – WDM DFB Fiber Optic Source Module

ILX Lightwave FOS-79800E – WDM DFB Fiber Optic Source Module The FOS79800E provides a WDM DFB fiber optic source module designed for the ILX FOM-7900B mainframe as the E-generation successor to the C- and D-series 79800 modules, with user-selectable ITU or custom wavelength in the C/L-band class, high stability, coherence control, and attenuation features. WDM channel source for transmitter and receiver test; OSNR and amplifier characterization; coherence-controlled source measurements; modular fiber test mainframe integration; long-term wavelength stability monitoring; C- and L-band network equipment verification. The FOS79800E provides a WDM DFB fiber optic source module designed for the ILX FOM-7900B mainframe as the E-generation successor to the C- and D-series 79800 modules, with user-selectable ITU or custom wavelength in the C/L-band class, high stability, coherence control, and attenuation features. WDM channel source for transmitter and receiver test; OSNR and amplifier characterization; coherence-controlled source measurements; modular fiber test mainframe integration; long-term wavelength stability monitoring; C- and L-band network equipment verification.



MODEL

**ILX Lightwave
FOS-79800E**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

FOS-79800E

LISTING

<https://aumictechlabs.com/products/fos-79800e-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The ILX Lightwave FOS-79800E is a WDM DFB fiber optic source module engineered for wavelength division multiplexing system and component testing. It integrates into the FOM-7900B System Mainframe to deliver stable, precisely controlled optical signals across S, C, and L-bands with picometer-resolution wavelength accuracy and closed-loop constant power operation.

Technical Specifications

- Wavelength Range:** S, C, and L-bands; C-band models operate 1527.98–1564.26 nm; service channels available at 1310 nm, 1480 nm, 1510 nm, and 1625 nm
- Tuning Range:** 1.7 nm per channel with 0.001 nm resolution
- Center Wavelength Accuracy:** Picometer resolution
- Wavelength Stability:** ± 3 pm (with ± 0.003 dB power stability); ± 0.005 dB short-term stability
- Output Power:** Up to 20 mW per channel; calibrated power levels 9–20 mW depending on model; user-configurable maximum levels
- Power Stability:** ± 0.003 dB (correlated with ± 3 pm wavelength stability); ± 0.005 dB short-term stability
- Modulation:** Internal synchronous modulation to 500 kHz; 100% depth, 50% duty cycle drive current; 1–500 kHz range across all active modules
- Optical Interface:** FC/APC connector

Key Features

- Coherence control for single-mode fiber applications
- Normal and inverted TTL-level modulation outputs for flexible data acquisition triggering
- Rear-panel modulation input enables multi-mainframe and external instrument synchronization
- Processor-controlled modulation with simultaneous application across all source modules

Firmware compatibility: FOS-79800E version 6.1 or higher requires FOM-7900B mainframe version 3.4 or higher

Typical Applications WDM system characterization, component performance validation, and optical signal source testing in laboratory and enterprise environments.

Compatibility & Integration Designed exclusively for the FOM-7900B System Mainframe. GPIB/IEEE-488 and RS-232 remote control interfaces support front-panel menu operation and command-line wavelength, power, calibration, and modulation control.

Features & description

From manufacturer datasheet

Features

- WDM DFB fiber optic source module for FOM-7900B mainframe
- E-generation module following FOS-79800C and FOS-79800D lines
- User-selectable ITU grid or custom wavelength (C/L-band class)
- High-stability DFB laser source
- Coherence control and attenuation
- Remote control via mainframe GPIB interface

FOS79800E Characteristics / Specifications

PARAMETER	VALUE
Model	FOS-79800E (FOS79800E)
Manufacturer	ILX Lightwave
Instrument Type	WDM DFB Fiber Optic Source Module
Host Platform	ILX FOM-7900B mainframe
Generation	E-series (after C/D variants)
Wavelength Selection	User-selectable ITU or custom (C/L-band class)
Laser Type	DFB (WDM source)
Stability	High-stability DFB source class
Features	Coherence control and attenuation
Remote Interface	GPIB via mainframe
Output Power/Wavelength	Confirm exact values on module faceplate
Family Reference	Similar 79800D/315-series modules may share feature class; do not assume identical faceplate power without verification
Alias	FOS79800E Standard Operating Conditions Install in compatible FOM-7900B mainframe with adequate cooling airflow. Allow warm-up per mainframe and module guidelines before precision wavelength or power measurements. Operate within rated optical output power indicated on the faceplate.
Exact output power and wavelength are printed on the module faceplate	do not assume 10 dBm or 13 dBm class values without verification, though the 79800D/315 family may show similar ranges. Distinguish FOS79800E from C- and D-generation modules when configuring test systems. Alias FOS79800E.
Wavelength stability	monitoring; C- and L-band network equipment verification.
Attenuation	features.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Manufacturer	ILX Lightwave
Instrument Type	WDM DFB Fiber Optic Source Module
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Standard Operating Conditions

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Operational Notes

Exact output power and wavelength are printed on the module faceplate-do not assume 10 dBm or 13 dBm class values without verification, though the 79800D/315 family may show similar ranges. Distinguish FOS79800E from C- and D-generation modules when configuring test systems. Alias FOS79800E.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.