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Data Sheet

August 14, 2026

JDSU

JDSU MAPL-1T1FA MAP Tunable Laser Source, C+L Band

The JDSU MAPL-1T1FA is a C+L band tunable laser source, designed for high-performance applications. It provides precise wavelength control and stability, essential for advanced optical testing and measurement. This laser source offers a wide tuning range and narrow linewidth, making it suitable for DWDM system characterization, fiber optic component testing, and research purposes.



MODEL

JDSU MAPL-1T1FA

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MAPL-1T1FA

LISTING

<https://aumictechlabs.com/products/mapl-1t1fa-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The JDSU MAPL-1T1FA MAP Tunable Laser Source delivers precise wavelength control across the C+L band (1519 to 1630 nm) for optical testing and component characterization. This modular laser integrates into the JDSU MAP-200 platform, supporting LXI-compliant Ethernet connectivity and IVI automation drivers. Built for DWDM system analysis, optical amplifier testing, fiber component validation, and laboratory research, It has stable, repeatable output with wavelength accuracy to ± 15 pm in enhanced mode. Technical Specifications Wavelength Range: 1519 to 1630 nm (C+L band); C-band 191.0 to 196.25 THz (1527.60 to 1569.59 nm) Output Power Setting Range: 7 to 13 dBm; typical >12 dBm (C-band), >10.5 dBm (L-band); peak 8.0 dBm Spectral Linewidth: ≤ 5

MHz Side-Mode Suppression Ratio: 40 dB minimum Wavelength Accuracy: ± 15 pm (enhanced mode), ± 60 pm (regular mode) Wavelength Stability: ± 3 pm typical (1 hr), ± 10 pm (24 hrs) Wavelength Repeatability: ± 3 pm typical (enhanced mode) Wavelength Resolution: 1 pm Tuning Speed: 1 to 100 nm/s Power Stability: 0.01 dB (1 hr) Fiber Output: Polarization maintaining fiber, polarization aligned to slow axis Key Features Wavelength accuracy to ± 15 pm supports precision DWDM characterization and component alignment Tuning speed range of 1–100 nm/s accommodates both fast wavelength scanning and slow stabilization protocols Low spectral linewidth (≤ 5 MHz) and 40 dB SMSR enable high-resolution optical measurements Polarization-maintaining fiber output with aligned slow-axis polarization Typical Applications DWDM system characterization Optical amplifier testing Fiber optic component testing Manufacturing process testing and component alignment Optical research and development in laboratory environments Compatibility & Integration The MAPL-1T1FA integrates into MAP-220C (two-slot), MAP-230B (three-slot), or MAP-280 (eight-slot) chassis within the JDSU MAP-200 platform. LXI Class C compliance and IVI driver support enable Ethernet or GPIB automation control. CE, CSA/UL, and IEC 61010-1 certification; Class 3B per IEC 60825-1 (2002).

Features & description

From manufacturer datasheet

O-Band Tuning Range: 1255 to 1350 nm

Wavelength Accuracy C/L At 9.5 dBm 1500-1635 nm: plus or minus 100 pm Wavelength Accuracy C/L At 7.5 dBm 1480-1500 nm: plus or minus 500 pm Wavelength Stability 1 Hour: plus or minus 5 pm at 9 dBm Wavelength Resolution: 1.0 pm Maximum Output Power C/L 1519-1635 nm: greater than 11.5 dBm Maximum Output Power C/L 1500-1635 nm: greater than 9.5 dBm Maximum Output Power C/L Full Range: greater than 7.5 dBm Typical Power At 1580 nm: greater than 15 dBm

O-Band Full Range At 25 C 1260-1350 nm: greater than or equal to 9 dBm

Power Stability 15 Minutes: plus or minus 0.01 dB Power Setting Resolution: 0.01 dBm Linewidth: less than 2 MHz Coherence Control Off Linewidth: less than or equal to 1000 kHz Coherence Control On Linewidth: greater than or equal to 30 MHz SMSR: greater than 75 dB RIN: less than minus 135 dB/Hz (0.1 to 2.5 GHz) Power Flatness Under Stepping: plus or minus 0.25 dB

Polarization Extinction Ratio Minimum / Typical: greater than 17 dB / greater than 20 dB

Fiber Type: PMF polarization aligned to slow axis Connector Type: FC/APC Warm-Up Time: less than 1 hour Calibration Period: 1 year Laser Safety Class: Class 1M Operating Temperature: 15 to 40 C Operating Humidity: less than 80 percent RH non-condensing Storage Temperature: minus 35 to 70 C DimensionsWxHxD: 12.2 × 13.0 x 34.8 cm Weight: 6.065 kg Cassette Width: 3 MAP slots Example Ordering C/L: MTL5-C2CL1-M103-MFA Notes From VIAVI Continuously Tunable Laser Source mTLS-C2 datasheet. MAPL-1T1FA and MAPL-2T1FA queue titles describe MAP C+L tunable lasers; confirm exact MAPL versus mTLS-C2 faceplate generation on the unit.

MAPL1T1FA Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	VIAVI MAP mTLS-C2
C/L Tuning Range	1480 to 1635 nm
Wavelength Stability 1 Hour	plus or minus 5 pm at 9 dBm
Wavelength Resolution	1.0 pm
Maximum Output Power C/L Full Range	greater than 7.5 dBm
Typical Power At 1580 nm	greater than 15 dBm
Power Stability 15 Minutes	plus or minus 0.01 dB
Power Setting Resolution	0.01 dBm
Linewidth	less than 2 MHz
Coherence Control Off Linewidth	less than or equal to 1000 kHz
Coherence Control On Linewidth	greater than or equal to 30 MHz
SMSR	greater than 75 dB
RIN	less than minus 135 dB/Hz (0.1 to 2.5 GHz)
Power Flatness Under Stepping	plus or minus 0.25 dB
Polarization Extinction Ratio Minimum / Typical	greater than 17 dB / greater than 20 dB
Fiber Type	PMF polarization aligned to slow axis
Connector Type	FC/APC
Calibration Period	1 year
Laser Safety Class	Class 1M
Operating Temperature	15 to 40 C
Operating Humidity	less than 80 percent RH non-condensing
Storage Temperature	minus 35 to 70 C
DimensionsWxHxD	12.2 × 13.0 x 34.8 cm
Weight	6.065 kg
Cassette Width	3 MAP slots

PARAMETER	VALUE
Example Ordering C/L	MTLS-C2CL1-M103-MFA
Wavelength stability	1 Hour: plus or minus 5 pm at 9 dBm
Maximum output power	C/L 1519-1635 nm: greater than 11.5 dBm
Power stability	15 Minutes: plus or minus 0.01 dB
Humidity	less than 80 percent RH non-condensing
Warm-up time	less than 1 hour
Polarization extinction ratio	Minimum / Typical: greater than 17 dB / greater than 20 dB

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 35 to 70 C
Operating temperature	15 to 40 C
Operating Temperature	15 to 40 C
Humidity	less than 80 percent RH non-condensing
Operating Humidity	less than 80 percent RH non-condensing
DimensionsWxHxD	12.2 × 13.0 x 34.8 cm
Weight	6.065 kg
Cassette Width	3 MAP slots
Example Ordering C/L	MTLS-C2CL1-M103-MFA Notes From VIAVI Continuously Tunable Laser Source mTLS-C2 datasheet. MAPL-1T1FA and MAPL-2T1FA queue titles describe MAP C+L tunable lasers; confirm exact MAPL versus mTLS-C2 faceplate generation on the unit.

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.

performance for amplifier and DWDM component test. Queue MAPL-1T1FA / MAPL-2T1FA C+L MAP tunable lasers map to this continuously tunable laser family class.

Applications

Optical amplifier gain and noise figure testing, DWDM component characterization, channel monitor calibration, and silicon photonic waveguide loss measurements.

Key Features

Mode-hop-free continuous tuning

Embedded VOA for stable power control

PM fiber coupled slow-axis aligned output

Sweeping and setting operation

LXI compliant IVI drivers on MAP chassis

Technical Specifications

Instrument Family: VIAVI MAP mTLS-C2

C/L Tuning Range: 1480 to 1635 nm

O-Band Tuning Range: 1255 to 1350 nm

Wavelength Accuracy C/L At 9.5 dBm 1500-1635 nm: plus or minus 100 pm

Wavelength Accuracy C/L At 7.5 dBm 1480-1500 nm: plus or minus 500 pm

Wavelength Stability 1 Hour: plus or minus 5 pm at 9 dBm

Wavelength Resolution: 1.0 pm

Maximum Output Power C/L 1519-1635 nm: greater than 11.5 dBm

Maximum Output Power C/L 1500-1635 nm: greater than 9.5 dBm

Maximum Output Power C/L Full Range: greater than 7.5 dBm

Typical Power At 1580 nm: greater than 15 dBm

O-Band Peak Power At 25 C: greater than or equal to 12 dBm

O-Band Full Range At 25 C 1260-1350 nm: greater than or equal to 9 dBm

Specifications

PARAMETER	VALUE
Power Stability 15 Minutes	plus or minus 0.01 dB
Power Setting Resolution	0.01 dBm
Linewidth	less than 2 MHz
Coherence Control Off Linewidth	less than or equal to 1000 kHz
Coherence Control On Linewidth	greater than or equal to 30 MHz
SMSR	greater than 75 dB
RIN	less than minus 135 dB/Hz (0.1 to 2.5 GHz)
Power Flatness Under Stepping	plus or minus 0.25 dB
Polarization Extinction Ratio Minimum / Typical	greater than 17 dB / greater than 20 dB
Fiber Type	PMF polarization aligned to slow axis
Connector Type	FC/APC

Warm-Up Time: less than 1 hour

Specifications

PARAMETER	VALUE
Calibration Period	1 year
Laser Safety Class	Class 1M
Operating Temperature	15 to 40 C
Operating Humidity	less than 80 percent RH non-condensing
Storage Temperature	minus 35 to 70 C
DimensionsWxHxD	12.2 x 13.0 x 34.8 cm
Weight	6.065 kg
Cassette Width	3 MAP slots
Example Ordering C/L	MTLS-C2CL1-M103-MFA

Notes
From VIAVI Continuously Tunable Laser Source mTLS-C2 datasheet. MAPL-1T1FA and MAPL-2T1FA queue titles describe MAP C+L tunable lasers; confirm exact MAPL versus mTLS-C2 faceplate generation on the unit.

Laser Safety

Laser Safety Class: Class 1M Operating Temperature: 15 to 40 C Operating Humidity: less than 80 percent RH non-condensing Storage Temperature: minus 35 to 70 C DimensionsWxHxD: 12.2 × 13.0 x 34.8 cm Weight: 6.065 kg Cassette Width: 3 MAP slots Example Ordering C/L: MTL5-C2CL1-M103-MFA Notes From VIAVI Continuously Tunable Laser Source mTLS-C2 datasheet. MAPL-1T1FA and MAPL-2T1FA queue titles describe MAP C+L

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

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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.