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Data Sheet
August 13, 2026

JDSU

JDSU SWS16101 TUNABLE LASER SOURCE 3642HE16 / M

The JDSU SWS16101 is a tunable laser source, model 3642HE16 / M, designed for precision optical testing and measurement applications. This laser source provides a stable and accurate wavelength output, essential for characterizing optical components and systems. Its tunability allows for versatile use across various wavelengths, making it suitable for research, development, and manufacturing environments.

MODEL JDSU SWS16101 / 3642HE16	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU SWS16101 / 3642HE16	LISTING https://aumictechlabs.com/products/sws16101-3642he16-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The JDSU SWS16101 is a precision tunable laser source for optical component characterization across the C+L band. Operating from 1541 nm to 1630 nm with 0.003 nm wavelength resolution, it delivers 3 dBm maximum output power into single-mode fiber. This instrument integrates into the JDSU Swept Wavelength Systems (SWS) architecture for rapid, accurate wavelength-dependent measurements of passive optical components - including full 40-channel DWDM characterization in under 90 seconds.Technical Specifications Wavelength Range: 1541 nm to 1630 nm (C+L band) Maximum Output Power: 3 dBm (2 mW) Wavelength Resolution: 0.003 nm Output Interface: Single Mode FiberKey Features High wavelength accuracy and stability for precise optical testing Real-

time wavelength measurement via integrated source optics module Significantly reduces test time versus traditional broadband source/OSA configurations Seamless integration with JDSU SWS receiver chassis and data acquisition systemTypical Applications Wavelength-dependent characterization of passive optical components DWDM filter and coupler testing Research and development of optical systems Manufacturing test and quality assurance Component evaluation in research environmentsCompatibility & Integration The SWS16101 is the core tunable laser source in JDSU Swept Wavelength Systems. The standard SWS package pairs this source with the source optics module (containing real-time wavelength measurement), a receiver chassis, data acquisition electronics, and application software. Integration requires a user-supplied computer for system control and data processing. The source optics module performs live wavelength tracking and communicates measurement data to the receiver for ratio calculations against a reference detector and the device under test.

Features & description

From manufacturer datasheet

Features

• C+L continuous tuning 1541 to 1630 nm • Wavelength resolution 0.003 nm • Maximum output power 3 dBm (2 mW) • Single-mode fiber output • Mode-hop-free smooth tuning class for narrowband devices • Integrates with automated swept-wavelength test architectures • Compact benchtop TLS form for lab and manufacturing stations • Module identity often marked 3642HE16 on SWS16101 units

SWS161013642HE16 Characteristics / Specifications

PARAMETER	VALUE
Model	SWS16101
Manufacturer	JDS Uniphase (JDSU)
Instrument Type	Tunable laser source (C+L)
Associated module / marking	3642HE16
Alias	SWS16101; JDSU SWS16101; 3642HE16
Wavelength range	1541 to 1630 nm
Band coverage	C-band + L-band
Wavelength span	89 nm
Maximum output power	3 dBm (2 mW)
Wavelength resolution	0.003 nm
Fiber type	Single-mode
Tuning behavior class	Smooth / mode-hop-free (product descriptions)
Primary host context	Swept Wavelength System (SWS) TLS role
Use domain	DWDM / passive optical component characterization
Output	Connectorized SMF
Form factor	Benchtop tunable laser instrument
Product family	SWS16xxx tunable laser sources
Related sibling class	SWS17101 C+L high-precision TLS family
Typical ship accessories class	Interlock key (configuration-dependent)
Operating role	Narrowband optical stimulus / swept source
Module OEM lineage class	Photonetics / JDS 3642HE series TLS modules Notes Specs from JDSU SWS16101 C+L TLS product descriptions associating 3642HE16 module marking. Confirm faceplate SWS16101 vs 3642HE16 labels, exact connector polish, and maximum power setting before acceptance testing. Finer linewidth/SSE figures belong on the specific laser module certificate when not published on the SWS16101 row.

SWS161013642HE16 Specifications

PARAMETER	VALUE
JDSU SWS16101 Tunable Laser Source (3642HE16)	Overview
Key Features	- C+L continuous tuning 1541 to 1630 nm
Technical Specifications	Model: SWS16101

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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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

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