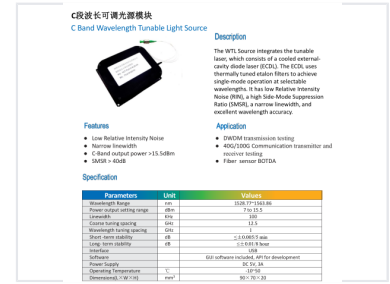


C-Band Tunable Wavelength Light Source

The WTL Source integrates a tunable laser, which consists of a cooled external-cavity diode laser (ECDL). The ECDL uses thermally tuned etalon filters to achieve single-mode operation at selectable wavelengths.



Overview

Precision C-Band Tunable Light Source

This C-Band Tunable Wavelength Light Source utilizes a cooled external-cavity diode laser (ECDL) with thermally tuned etalon filters to ensure precise, single-mode operation. Designed for high-performance applications, it delivers low Relative Intensity Noise (RIN), a high Side-Mode Suppression Ratio (SMSR), and narrow linewidth for exceptional wavelength accuracy. It is an ideal solution for advanced fiber optic testing, including DWDM transmission and communication system verification.

Key Performance Metrics

Core Performance

15.5 dBm

Max Power Output

100 KHz

Linewidth

40 dB

SMSR

Technical Specifications

Tuning Spacing

- Coarse tuning: 12.5 GHz
- Wavelength tuning: 1 GHz

Stability

Metric	Value
Short-term stability	$\pm 0.005 \text{ dB} / 5 \text{ min}$
Long-term stability	$\pm 0.01 \text{ dB} / 8 \text{ hour}$

Wavelength Range

1528.77 - 1563.86 nm

Connectivity & Power

Interface

USB, GUI Software, API for Development

Power Supply

DC 5V, 3A

Environmental & Physical

Operating Temperature

-10 to 50 °C

Dimensions (L x W x H)

90 x 70 x 20 mm³

Applications

Primary Applications

DWDM Transmission Testing • 40G/100G Communication Testing • Fiber Sensor BOTDA