

VCSEL-T-EVAL



DEVICE

Tunable VCSEL Evaluation Module

OVERVIEW

The Optilab VCSEL-T-EVAL is an evaluation module for Optilab VCSEL-15XX-T series high-speed wavelength tunable vertical cavity surface emission lasers (VCSEL). This evaluation module can be used to drive the laser with the optical power and the wavelength tuning function. In addition, the module provides fast continuous wavelength sweeping by either the internal trigger signal or by an external trigger signal. The module contains a trigger out connector for synchronized measurement and an LCD display for parameters monitoring. Contact Optilab for more information.

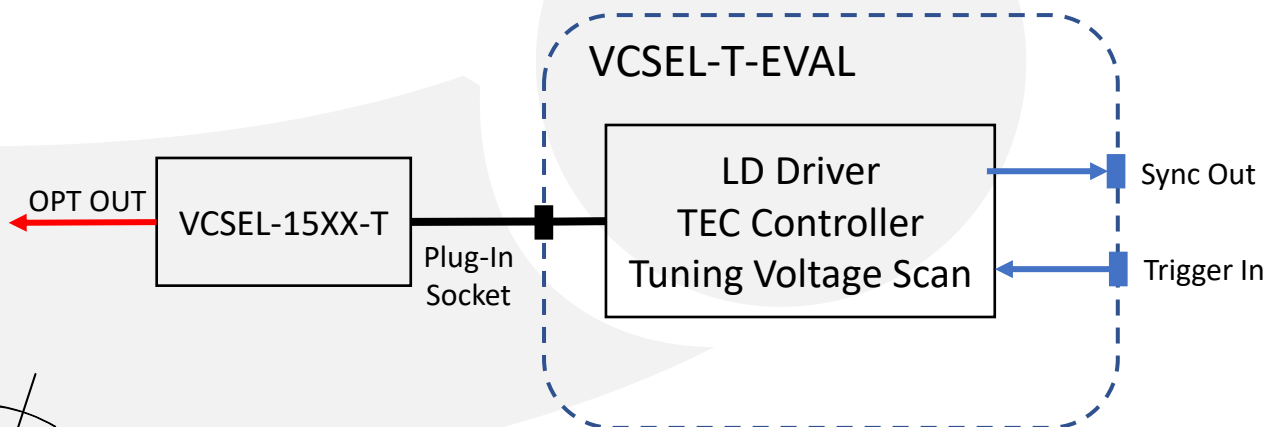
FEATURES

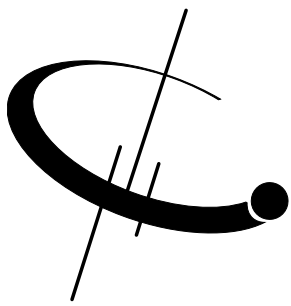
- Fixed or Sweeping Wavelength Mode
- Internal & External Triggered Wavelength Sweeping
- Up to 100 kHz Wavelength Sweeping
- Jog-dial Control
- LCD Display
- USB & RS-485 Remote Control

USE IN

- FBG Sensing
- Optical Coherence Tomography
- Fiber Optic Component Qualification
- Laboratory Testing & Measurement

APPLICATION DIAGRAM





VCSEL-T-EVAL

SPECIFICATIONS

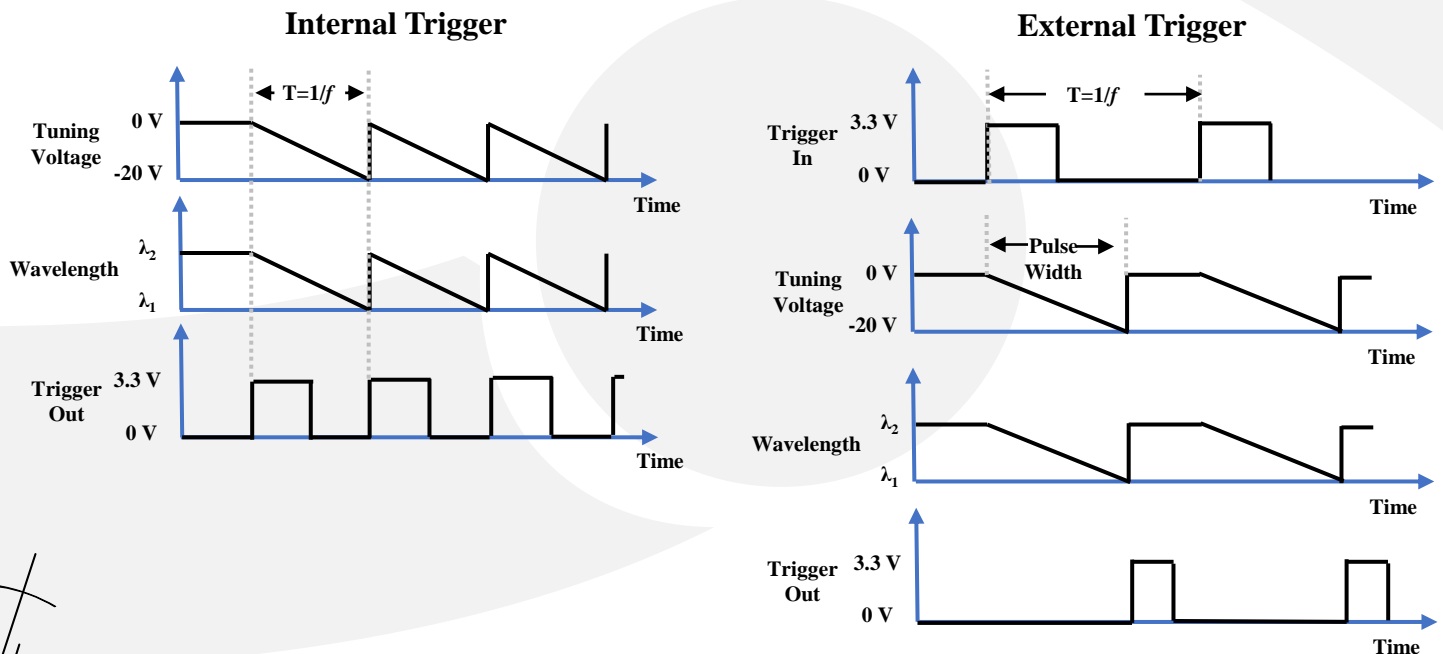
GENERAL

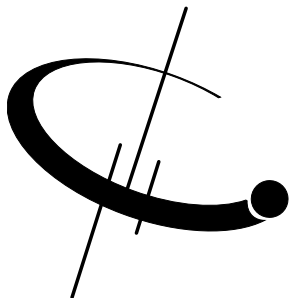
Laser Current Driver	0 to 23 mA, ACC mode
TEC Temperature Control	15 to 35 °C
Wavelength Setting Mode	Fixed or Sweeping
Wavelength Tuning Voltage	0 to -20V
Output Range	
Scanning Speed (Internal Trigger)	1 Hz, 10 Hz, 100 Hz, 1 kHz, 5 kHz, 10 kHz, 50 kHz, and 100 kHz.
Scanning Speed (External Trigger)	Single Shot to 100 kHz
External Trigger Level	+3.3 V LVCMOS Clock
Trigger Out	+3.3 V LVCMOS Clock (50% duty square wave for internal trigger, 5µs square pulse for external trigger)
Trigger In and Sync Out Connector	SMA Female

MECHANICAL

Operating Temperature	10°C to +50°C
Storage Temperature	-10°C to +70°C
Display	LCD
Local Control	Jog Dial
Remote Control	RS-485 and USB2.0
Dimensions	280 mm x 150 mm x 45 mm
Power Supply	100-240 VAC

SWEEEPING TIMING DIAGRAM





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RELATED PRODUCT

- **VCSEL-15XX-T**



The Optilab VCSEL-15XX-T is a wavelength tunable Vertical Cavity Surface Emitting Laser (VCSEL) diode. Utilizing a MEMS based tuning capacity, its peak wavelength can be tuned over 10 nm up to 100 kHz. Contact Optilab for more details.

