

# 10G EML Light Source Module

This light source module combines an electronic driver and control circuit with a special EM laser diode. The product features low modulated voltage, low power consumption, and high speed.



## Overview

### High-Performance EML Light Source

The 10G EML Light Source Module integrates an electronic driver, control circuit, and a specialized EM laser diode into a single semiconductor chip. By combining an electrical absorptive modulator with a CW laser, this module achieves low modulated voltage, minimal power consumption, and high-speed operation. It is an ideal solution for demanding 10Gbps/40Gbps high-speed optical fiber communication systems and RF-MW photonics applications.

## Optical Performance

### Output Power

**2 mW**

Min Power

**4 mW**

Max Power

### Side-Mode Suppression Ratio

**35 dB**

Min SMSR

**40 dB**

Max SMSR

### Center Wavelength (ITU)

1525 nm

### Extinction Ratio

8 dB

## Electrical & Operational

### Modulator Rate

**10 Gbps**

Min Rate

**11.1 Gbps**

Max Rate

### Driving Voltage

<2.5V

### Threshold Current

25 mA

### Power Supply

DC 5V/2A

### Operating Temperature

-5°C to 75°C

## Connectivity & Physical

RF Connector

SMA

### Available Dimensions

- 90x70x18 mm<sup>3</sup>
- 320x220x90 mm<sup>3</sup>

Fiber Type

PM, SM

## Applications

### Primary Applications

- 10Gbps High-speed optical fiber communication systems
- 40Gbps High-speed optical fiber communication systems
- RF-MW photonics