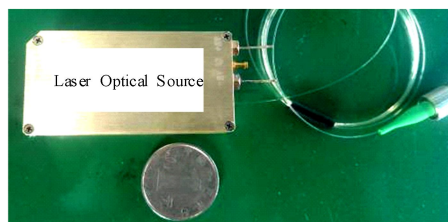


# Laser Source Module

DATASHEET | OCTOBER 2024



This product outputs a single channel of low noise and narrow linewidth optical signals through the electro-optic conversion of a laser, providing a stable optical carrier for electro-optic external modulators under a wide environmental temperature range. The product offers a full wavelength series selection from ITU.

## Applications

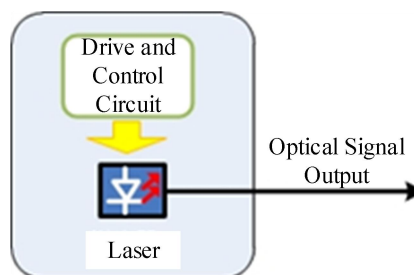
- Radar
- Electronic countermeasures
- Communications
- RF signal transmission
- Other platforms include ground, vehicle-mounted, airborne, and spaceborne systems

## Features

- Compact
- Lightweight
- Low noise
- Stable wavelength across a full temperature range
- A capacity for mass production

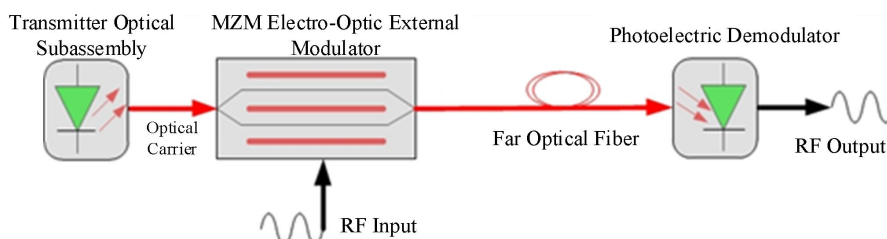
## Product Schematic Diagram

The product primarily consists of a low noise laser, a driving control circuit board and an external DC power supply. It employs a non-sealed metal package, with the output optical interface configured as an FC/APC connector. The schematic diagram of the product is shown below:



## Typical Application Example

A typical application example is shown in the figure below, which provides an optical carrier for the MZM electro-optic external modulator.



# Laser Source Module

DATASHEET | OCTOBER 2024

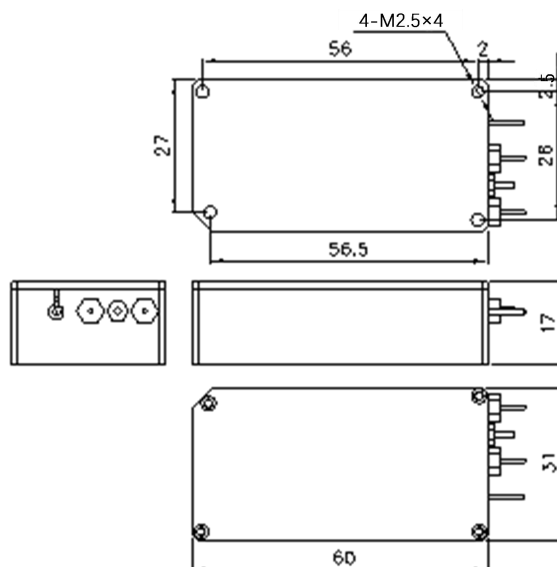
## Typical Indicator

Operating Conditions	
Operating Temperature (T <sub>A</sub> )	-55°C~+70°C
Power Supply Voltage (V <sub>cc</sub> )	±5V±0.1V
Power Supply Current (I <sub>cc</sub> )	≤200mA
Performance Indicators	
Output Optical Power	≥20mW (CW) (Customizable within 120mW)
Wavelength (6 conventional wavelengths, ITU full wavelength series customizable)	1541.9±1.3nm
	1545.1±1.3nm
	1548.7±1.3nm
	1551.9±1.3nm
	1554.7±1.3nm
	1558.4±1.3nm
RIN Noise	≤-155dBc/Hz
Quality Level	
This product meets MI-level military standards for application environment.	

## Interface Definition

Type	Connector
Output Port	FC/APC(Other types of connectors and fiber types can be customized)
Fiber	SMF-28(Standard)
Power Supply	EMI capacitance filter Pin (Soldering temperature not exceed 300°C for more than 3 seconds)

## Outline Drawing



# Laser Source Module

DATASHEET | OCTOBER 2024

Package Type: Metal cavity package.

External Dimensions: 56.6mm×31mm×17mm (Length×Width×Height)

## Physical Photo

