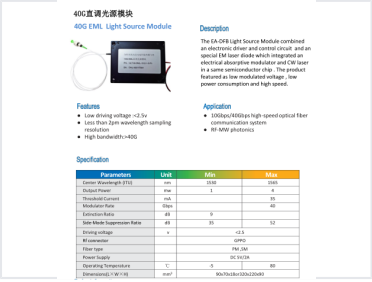
MERHEIN
Technical Datasheet

17 April 2026

40G EML Light Source Module

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



Product Overview

High-Speed EML Light Source Module

The EA-DFB Light Source Module integrates an electronic driver, control circuit, and a specialized EM laser diode featuring an electrical absorptive modulator and CW laser on a single semiconductor chip. Engineered for high-speed performance, this module offers low modulated voltage and power consumption. It is an ideal solution for 10Gbps/40Gbps high-speed optical fiber communication systems and RF-MW photonics applications.

Optical Performance

Center Wavelength (ITU)

1530 nm	1565 nm
Min	Max

Output Power

1 mW	4 mW
Min	Max

Side-Mode Suppression Ratio

35 dB	52 dB
Min	Max

Technical Specifications

Modulator Rate	40 Gbps
Extinction Ratio	9 dB
Driving Voltage	<2.5V
RF Connector	GPPO
Fiber Type	PM, SM

Rooms 05–15, 13A/F South Tower, World Finance Centre, Harbour City, 17 Canton Rd, Tsim Sha Tsui, Kowloon, Hong Kong

Operational Details

Dimensions (LxWxH)

- 90x70x18mm
- 320x220x90mm

Power Supply	DC 5V/2A
Operating Temperature	-5°C to 80°C

Applications

Primary Applications

- 10Gbps/40Gbps high-speed optical fiber communication system
- RF-MW photonics