## Finisar<sup>®</sup>

# Endurance

For Industrial and Military Applications

## **PRODUCT BRIEF**

### **KEY FEATURES**

- Supports 1 Gb/s to 10.3 Gb/s optical data links over multimode fibers
- Multi-rate versions available
- Compact form-factor: Half the size of SFF transceivers
- Board-mounted
- Built-in digital diagnostic functions
- Duplex LC optical connection
- Single 3.3V power supply
- Interoperable with standard SFP and SFP+ optical transceivers
- Extended operating temperature range of -40°C to 85°C
- Option for conformal coating for high reliability in corrosive environments
- Qualified to applicable tests in MIL-STD-810G, MIL-STD-883 and GR-486-CORE
- Meets applicable requirements for Gigabit Ethernet, 10 Gigabit Ethernet, and Fibre Channel

## **APPLICATIONS**

- 10 Gigabit Ethernet
- 1 Gigabit Ethernet
- 8G Fibre Channel
- 4G Fibre Channel
- 2G Fibre Channel
- Proprietary high-speed data links

## RUGGED AND COMPACT 1 to 10 Gb/s OPTICAL TRANSCEIVERS

#### **OVERVIEW**

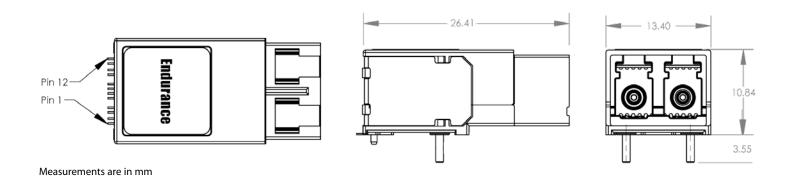
Endurance<sup>®</sup> is a family of compact transceiver modules designed to be rugged and robust so they are optimal for industrial and military applications. They have a wide operating temperature range, a metal housing to minimize effects of Electro-Magnetic Interference, two through-hole mounting posts to stabilize under shock and vibration conditions, and the pins are soldered directly to the Printed Circuit Board (PCB) to ensure constant connectivity. Endurance modules are available with conformal coating for additional reliability in harsh environments. They have been qualified to Telcordia and Military standards.

The simple serial interface is independent of protocol and can thus be used in a wide range of applications. Digital diagnostic functions for monitoring and control of the module are provided via a 2-wire serial interface.

#### **KEY ADVANTAGES**

- Robust for environments with extreme temperatures, shock and vibration, electromagnetic interference, and corrosion
- Saves valuable board space with its compact size
- Light weight fiber optic solution for data links compared to coaxial cable
- Low power consumption
- Utilizes Finisar's vertically integrated and highly reliable VCSEL technology and integrated circuit capabilities





### **SPECIFICATIONS**

Parameter	Value
Supply Voltage	3.3 Volts
Supply Current, Max	300 mA
Tx Optical Wavelength	850 nm
Operating Temperature Range	-40 C to +85 C
Link Distance	26 to 300 meters* (10 Gb/s) 70 to 150 meters* (4 Gb/s) 300 to 550 meters* (1 Gb/s)

\*Dependent on multi-mode fiber type

## **PRODUCT SELECTION**

Part Number	Description
FTE8510K1LTN	Endurance, 10 GbE, -40C to 85C, No Conformal Coating
FTE8510K1LTY	Endurance, 10 GbE, -40C to 85C, Conformal Coating
FTE8504K1LTN	Endurance, 1 GbE & 4G/2G/1G Fibre Channel, -40C to 85C, No Conformal Coating
FTE8504K1LTY	Endurance, 1 GbE & 4G/2G/1G Fibre Channel, -40C to 85C, Conformal Coating

## SIZE COMPARISON



SFF

Endurance

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