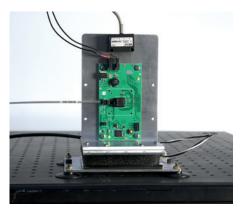
# REFLEXPHOTONICS®

# The most rugged high-performance embedded transceivers.

Reflex products are intrinsically robust making them the ideal choice for the most demanding environment. The sealed optical path guarantees optimum performances over high temperature and humidity ranges. *Light*ABLE based products can be surface mounted and meet the strictest shock and vibration requirements for industrial and military applications.

# Reflex Photonics components undergo a severe test program.



# **Mechanical integrity**

#### **Vibration test**

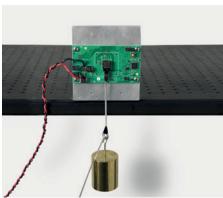
- Simple harmonic motion
- 20 Hz to 2000 Hz
- 20 G peak acceleration
- 4 times in each axis
- BER <10<sup>-12</sup> maintained

#### **Mechanical shock**

- · Shock pulsed of 500 G
- Pulse duration 0.5 ms
- 5 repetitions
- 6 spatial orientations







### Live fiber pull test

- 1 kg weight attached to cable
- 10 min observation time:
  BER <10<sup>-12</sup> maintained

### Thermal shock

- 20 cycles
- 0 °C to 100 °C
- Dwell time: 10 min







# **Environmental testing**

### **Temperature cycling**

- Cycling range: -40 °C to 85 °C
- Cycling ramp: 10 °C per min
- 1000 cycles
- Mil-STD-883E Method 103B

### **Damp heat**

- Temperature and humidity test
- MIL-STD-202G, Method 103B
- 500 h at 85 °C and 85 % RH

### **Temperature stress**

- Cold storage: -57 °C
- Hot storage: 125 °C

#### **Reflow test**

- Lead (Sn-Pb)
- RoHS







#### www.reflexphotonics.com

THE *Light* on Board® Company







