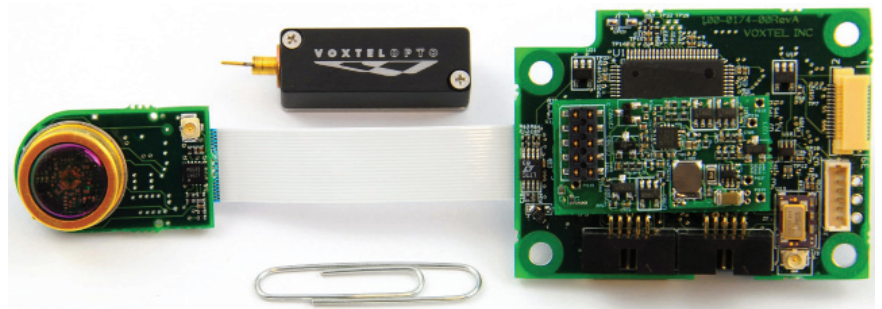


ROX™ Series Laser Rangefinder Module for Original Equipment Manufacturers

Features

- Turnkey Integration & Programmable Interface
- Eye Safe Transmitter: Class 1, 1535-nm laser
- Range: 4 km with 25 mm receive optics
- High Precision: Single shot variance 0.2 m accuracy
- Diffraction-limited beam quality (M^2): 1.2
- High Sensitivity: < 1 nW NEI
- Real-time measurement: Single-shot operation up to 10 Hz
- Low Power: 800 mW
- Lifetime: 200 million shots
- Harsh Environments: Qualified to MIL-STD-833 and MIL-STD-202



EVK Series

The compact ROX™ micro-laser rangefinder (μ LRF) original equipment manufacturer (OEM) module is designed for manufacturers of man-portable, UAV-mounted, and scope-mounted ranging systems.

Easy to integrate and operate, the low-cost turnkey μ LRF module integrates a diode-pumped solid-state pulsed erbium-doped glass (Er:glass) laser and a high-performance indium-gallium-arsenide (InGaAs) avalanche photodiode (APD) with custom amplification and pulse-processing circuits and a programmable interface.

With industry-leading performance, the module operates in the eye-safe 1535-nm spectral range, achieving noise equivalent input (NEI) of 800 pW, dynamic range of 70 db, and excellent damage threshold levels of 6 MW/cm².

Applications

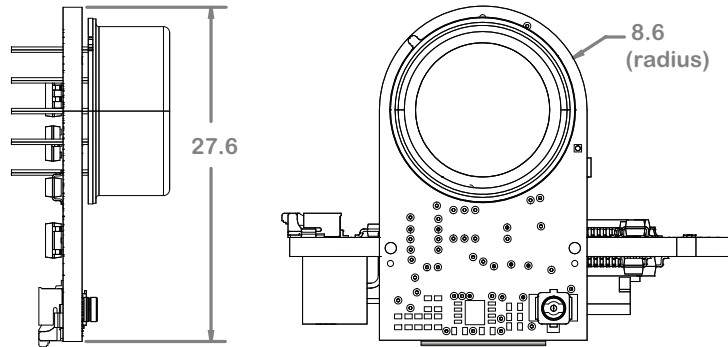
- UAV- or weapon-mounted rangefinders
- Crew-served weapons
- Mapping & Altimetry
- Sports & Recreation
- Police & Paramilitary

Specifications**Model EVKI-NABA**

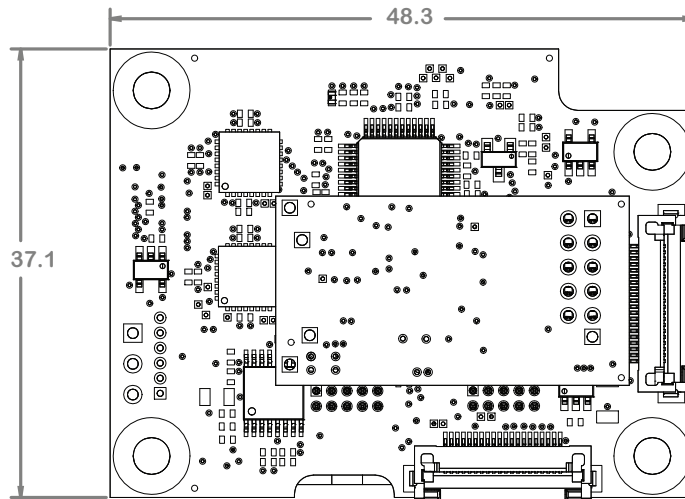
	Min	Typical	Max	Conditions
Transmitter				
Wavelength		1535 nm		
Pulse Energy		100 µJ		at 25°C
Pulse Width		3.8 ns		
Peak Power		30 kW		
Pulse Repetition Frequency		single shot	10 Hz	
Beam Diameter		0.7 mm		
Beam Divergence		4.2 mrad		
Beam Quality (M ²)		1.2		
Receiver				
Diameter		200 µm		
NEI		800 pW		
Ranging Performance				
Timing Resolution		60 ps		
Range Precision		200 mm		
Range Limits	10 m		4 km	25 mm receive optics
Electrical				
Power Consumption		800 mW	1.7 W	10 Hz repetition rate
Mechanical				
Weight			52 g	
Environmental				
Operating Humidity		90% relative humidity		MIL-STD-883 Method 1004
Operating Temperature		-40°C to +60°C		
Shock		1500 g, 0.5 ms		MIL-STD-202 Method 213
Vibration		20–2000 Hz, 20 g		MIL-STD-883 Method 2007
Lifetime (MTTF)		2 x 10E8 shots		Mean time to failure

EVKI-NABA Component Dimensions (mm)

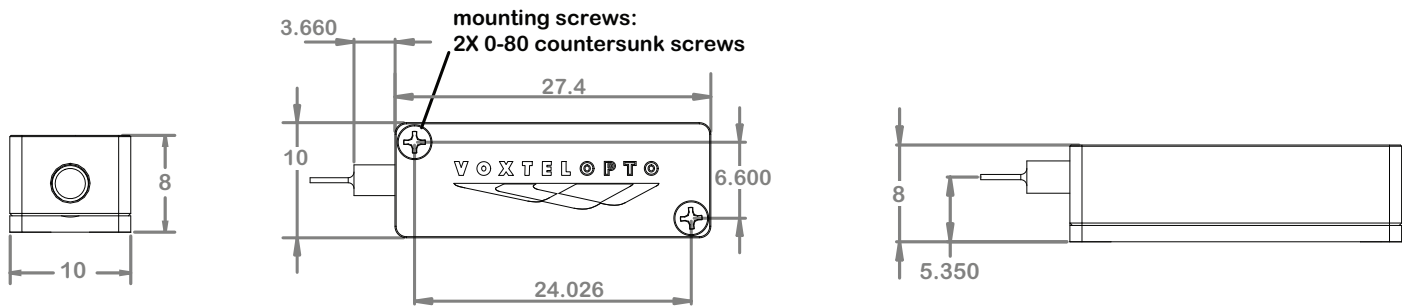
Receiver



System Board



Transmitter



Specifications**Model EVKI-NABA**

Connector	Pin	Description
J9	5, 9, 11, 13, 15, 17, 19, 21, 23, 25	DC Ground
J9	10, 12	1.8 V DC
J9	18, 20	3.3 V DC
J9	22, 24, 26	5 V DC
J12	3	Transmit
J12	5	Receive
J12	9	DC Ground

**CAUTION**

Class I Invisible Laser
Radiation Present

Avoid long-term viewing of laser.