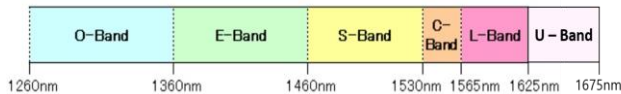




I*Sense® 64K-Wideband Interrogator



The IFOS I*Sense® 64K-Wideband (WB) optoelectronic interrogator offers a cost-effective, high Fiber-Bragg-Grating (FBG) count, and high-speed solution for monitoring and control.

Key features & benefits of the I*Sense® 64K-WB product are:

- Highly scalable and expandable to over 6,000 FBGs
- Multi-optical-band with E, S, C, L, U bands (O optional)
- Fast inter-fiber FBG array auto-switching capabilities
- GUI control for connecting to any FBG array at high speeds
- High sampling speed of up to 6 kS/s for every FBG per fiber
- High resolution, accuracy, and dynamic range (high SNR)
- Remote monitoring capability (10-50 km reach)
- Reliable solid state design with no moving parts
- Operates in harsh and demanding environments
- Long life and high reliability
- Integrated PC for single-box intelligent monitoring
- Customizable decision aid algorithms and displays
- Fiber or wireless backhaul transmission capability

The I*Sense® 64K-WB interrogator enables different sensing elements to be deployed on a single optical fiber for a mix of strain, temperature and other derivative measurements, including: vibration & acoustics (dynamic strain), displacement, tilt, pressure, chemical and biochemical measurements, to meet varying monitoring needs at numerous discrete locations. Customized sensors available upon request.

I*Sense® 64K-WB Product Specifications	
Spectral Bands	E, S, C, L and U bands switchable at high speeds (O band optional)
Number of Fiber Channels	64
Number of Sensors Per Fiber Channel	100
Sampling Rate	6,000 Samples / second
Strain Range	± 5,000 micro-strain
Strain Resolution	< 0.1 micro-strain
Temperature Resolution	< 0.05°C
Absolute Accuracy (±)	< 1 micro-strain, < 0.1°C
Dynamic Range (SNR)	100 dB
Sensor Reach	10-50 km (band-dependent)
Optical Connectors	FC/APC or E2000
Dimensions (W x D x H)	480 x 500 x 178 mm ³ rack mount 4U
Weight	<20 kg
Power Supply Voltage	Universal 85 to 240 VAC
Power Consumption	<100 W (incl. computer)
Interface	Integrated PC
Software	Windows 10
Operating Temp. Range	0 to 55°C (-10 to 70°C Optional)
Rating	Commercial (optional Ruggedized version available)