



I*Sense® HS-92M



I*Sense® HS-92M Specs

Number of Fibers	1 (larger numbers with optional switch and firmware, e.g., HS-92M-4Si 1x4 internal switch module increases the number of fibers supported to 4)
Sensors per fiber	16 FBG at ± 500 µstrain 8 FBG at ± 1500 µstrain Other # of Sensors/fiber available upon request
Detection Speed	1.3 MS/s simultaneously for up to 16 FBGs; Higher speed available upon request
Resolution	0.1 pm
Absolute Accuracy	± 2 pm
Dynamic Range	50 dB
Maximum Reach	100 km
Optical Connectors	FC/APC or E2000
Operating Temp. Range	0 - 55°C (-10 - 70°C optional)
Optical Power	5 to 14 dBm
Power Supply Voltage	85 - 240 V
Power Consumption	50 W
Dimensions (WxDxH)	430 x 460 x 178 mm ³ rack mount 4U
Weight	15 kg
Lifetime	> 25 years
Wavelength Range	1528 to 1562 nm (C band) Additional optical bands available upon request
Interface	Integrated PC
Software	Windows 10, C++ executables (FBGView: ISenseDL, CollectBurst)

The IFOS I*Sense® HS-92M offers a state of the art ultra-high- speed integrated solution for monitoring up to 16 Fiber Bragg Grating (FBG) sensors.

Key features and benefits of this IFOS I*Sense® are:

- Directly measures temperature, static and dynamic strain
- Can measure vibration, acoustics and acoustic emissions
- Multiple sensors multiplexed on a single fiber all see the full sampling rate
- High speed of up to 1.3 MS/s for every FBG on a fiber within a single wavelength band (C-band). Higher speed available upon request
- Scalable with multiple fiber connection capabilities
- High resolution, accuracy, and dynamic range
- Automatic calibration
- Remote monitoring system for up to 100 km
- Solid state, no moving parts
- Compact, lightweight, low power consumption
- Operates in harsh and demanding environments
- Long life and high reliability
- Integrated intelligent monitoring system
- Customizable decision aid algorithms and displays
- Fiber or wireless backhaul transmission capability

The I*Sense® provides simultaneous data display and storage for all its channels with every FBG seeing the full bandwidth, offering high precision, remote monitoring, long life, large dynamic range, and high measurement range with optional multiple optical bands available for expansion. Different sensing elements can be deployed on a single optical fiber enabling a mix of strain, temperature and derivative measurements for e.g. displacement, tilt, pressure, chemical and biochemical measurements, to best meet varying customer needs at a series of discrete locations. Customized sensors are available upon request.