

FiSpec NEO30

The NEO30 FBG Interrogator is FISENS' latest instrument for precise FBG measurements, offering up to 300 sensing points over 12 fibers. Designed for easy industrial integration, it supports major fieldbuses such as PROFINET, CAN, and Ethernet. Powered by an RTOS and featuring a web server and OTA firmware updates, the NEO30 enables straightforward, IoT-ready multipoint temperature and strain sensing.

- Up to 12 Channels & 300 Sensing Points • IoT-ready • High Precision/Accuracy • Easy Installation



Performance

Type	NEO30-6	NEO30-12
Number of Channels	6	12
FBG Sensors/Channel	Up to 25	
Total FBG Sensors	150	300
Max. Sampling Rate	up to 100 Hz (simultaneous)	

Per Fiber Channel

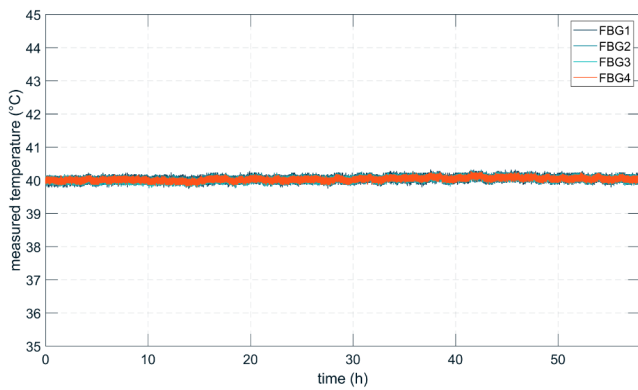
	Wavelength	Typ Temperature	Typ Strain
Total Measurement Range	72 nm	11,000 °C	110,000 µm/m
Precision (10 Hz, 2σ)	4 pm	0.6 °C	6 µm/m
Accuracy*	12 pm	2 °C	20 µm/m
Repeatability	6 pm	1 °C	10 µm/m

* for a device ambient operating temperature range of 10-50°C

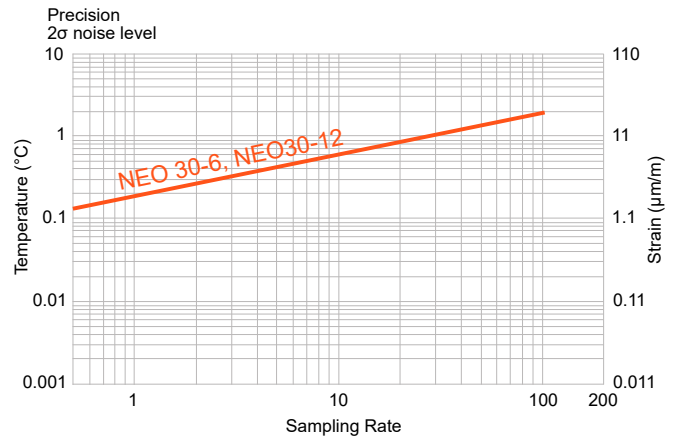
Physical & Communication

Operating Temperature	-20 to 70 °C	
Storage Temperature	-40 to 80 °C	
Dimensions	162.5 x 155 x 49 mm ³	
Weight	750 g	
Power Consumption	4 W	6 W
Optical Interface	LC/APC	
Electrical Interface	10-28 VDC, USB, Ethernet, CAN	
Data Protocol	CANopen, CAN Raw, PROFINET, TCP and MQTT (on request)	

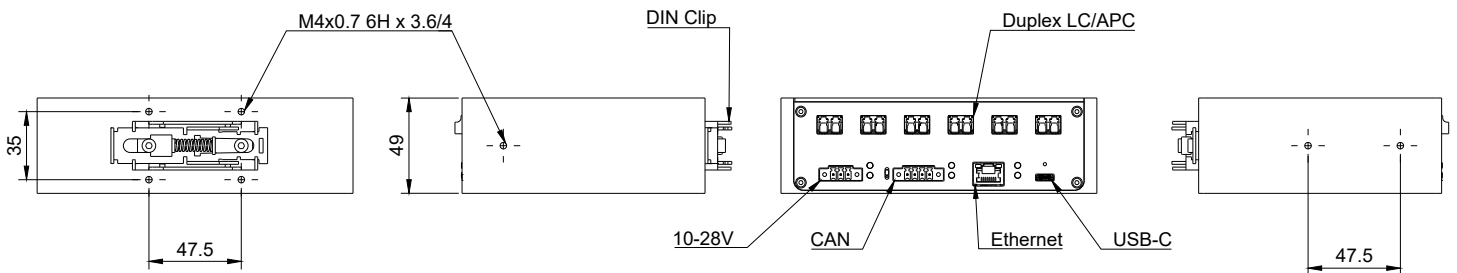
Long-Term Stability (<math><0.06\text{ }^{\circ}\text{C}</math> @ 60 h, σ)



Typ Precision vs. Sampling Rate (Hz)

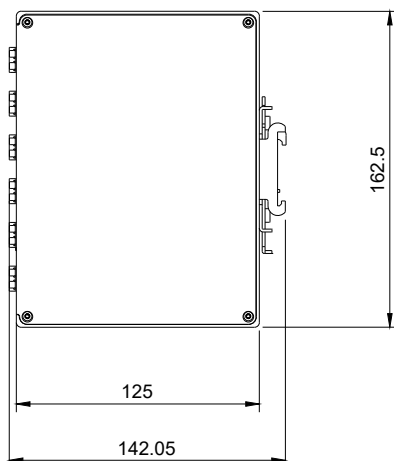


Technical Drawing



NEO30-12

- Channel 1
- Channel 2
- Channel 3
- Channel 4
- Channel 5
- Channel 6
- Channel 7
- Channel 8
- Channel 9
- Channel 10
- Channel 11
- Channel 12



NEO30-6

- Channel 1
- Channel 2
- Channel 3
- Channel 4
- Channel 5
- Channel 6

