

## C-band FBG Interrogator

**Model #:** FBGI-97001C

**Description:** FBG Interrogator is based on self-developed patented technology, based on a scanning semiconductor laser, integrated with multi-channel simultaneous photodetection, which enables high-speed, high-precision fiber grating demodulation in the 40 nm range. High-precision wavelength calibration ensures the accuracy and repeatability of wavelength demodulation, and the built-in absolute reference ensures the demodulator has excellent performance over the full temperature range.

### Applications:

- Medical field: monitoring vital signs and ensuring the safety of medical equipment.
- Industrial field: aid in controlling and optimizing processes.
- Military field: provide critical data for security and surveillance purposes.

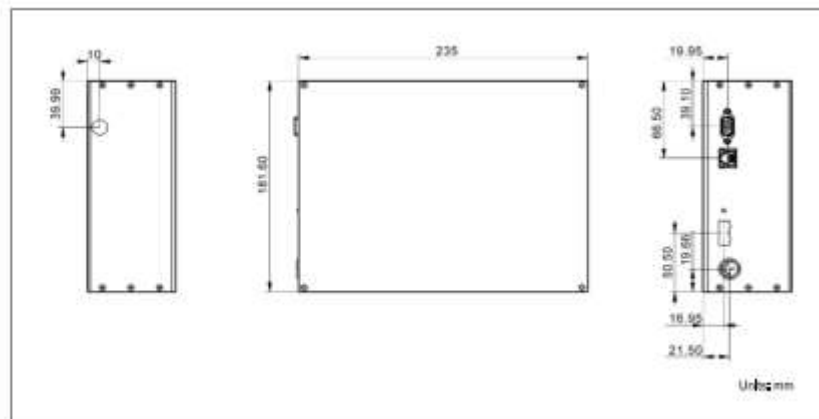
### Key Features:

- High Repeatability  $\pm 2$  pm
- High Speed Measurement up to 1 kHz
- Built-In All-Semiconductor Components, Stable and Reliable
- Simultaneous Measurement of All Channels with Built-In Absolute Reference

### Specifications:

Parameter	Unit	Specifications
Demodulation Range	nm	1528 - 1568
Demodulation Frequency <sup>1</sup>	Hz	1 - 1000
Sweep Step	GHz	$\geq 2$
Channel Number		8/16/24/32
Sensors/Channel		$\leq 30$
Wavelength Repeatability	pm	$\pm 2$
Wavelength Stability	pm	$\pm 10$
Dynamic Range <sup>2</sup>	dB	$\geq 25$ or $\geq 35$
Side Mode Suppression Ratio	dB	$\geq 40$
Operating Temperature	$^{\circ}\text{C}$	-15 to +55
Communication Interface		RJ45/RS232
Power Supply <sup>3</sup>	W	$\leq 18$ or $\leq 20$
Dimension	mm	235 x 205.6 x 72

### Dimensions



**Ordering Information: FBGI-97001C-AAAA-BB-C-D**

AAAA: Sweep Speed (Hz)	BB: Channel	C: connector type	D- Installation
0003 - 3	08 - 8 channel	1 - FC/UPC	F - Flange
0100 - 100	10 - 16 channel	2 - FC/APC	P - Fiber pigtail (500mm)
1000 - 1000	24 - 24 channel	X - other	
XXXX - other	32 - 32 channel		