

C-Band FBG Interrogator

Description

Arcadia Optronix's 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.

Key Features

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

Specifications

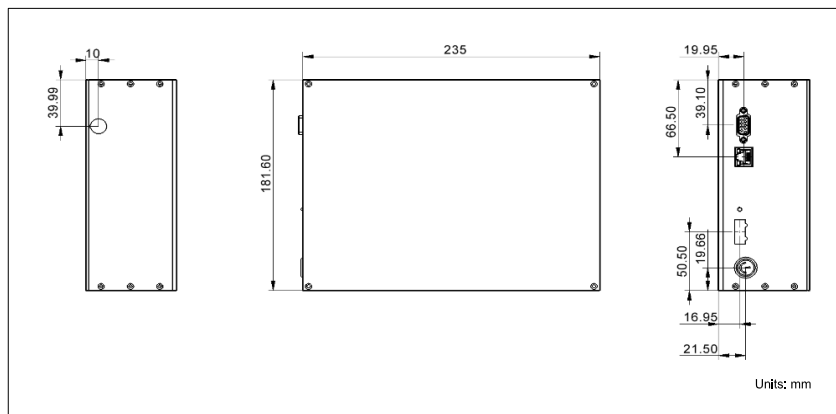
Parameter	Unit	Value
Demodulation Range	nm	1528 - 1568
Demodulation Frequency ¹	Hz	1 - 1000
Sweep Step	GHz	≥ 2
Channel	-	8/16/24/32
Sensors/Channel	-	≤ 30
Wavelength Repeatability	pm	± 2
Wavelength Stability	pm	± 10
Dynamic Range ²	dB	≥ 25 or 35
Operating Temperature	$^{\circ}\text{C}$	- 15 to + 55
Communication Interface	-	RJ45/RS232
Power Supply ³	W	≤ 18 or 20
Dimensions	mm	235 x 205.6 x 72

¹Demodulation Frequency: logarithmic gain ≤ 3 Hz, linear gain ≤ 1000 Hz.

²Dynamic Range: logarithmic gain ≥ 35 dB, linear gain ≥ 25 dB.

³Power Supply: logarithmic gain ≤ 18 W, linear gain ≤ 20 W.

Dimensions



Ordering Information

GC-97001C-①①-②②-③-④

①①: Demodulation Frequency (Hz)

06 - 3

01 - 100

02 - 1000

SS- Customized

②②: Channel

02 - 8

03 - 16

04 - 24

05 - 32

③: Connector Type

A - FC/APC

U - FC/UPC

S - Customized

④: Installation

F - Flange

P - Fiber Pigtail (500 mm)