



FBG Interrogator-Product Datasheet

Key Features

- High-speed Scan and Demodulation
- All Solid State
- Accurate and High Repeatability
- Highly Environmental Robustness
- User software provided for host PC
- Multiple communication protocols



Description

This FBG Interrogator is designed and manufactured with an in-house tunable laser from OptoChip Ltd. It supports 4/8/16 channels of fiber sensing data synchronous modulation, with a maximum demodulation frequency of 1kHz. The wavelength tuning range is between 8~10nm within the C-band, and the minimum sweep step is 10pm (step customization available). It has high wavelength accuracy, and a fast demodulation speed. In addition, it provides a user-friendly host computer software that can support fast evaluation, as well as rapid system setting-up and testing. It also features several communication protocols to facilitate customers' subsequent development and system integration. This product is the ideal choice for applications in the field of fiber optic sensing.



Applications

- Optical Research, Experiments & Tests
- Demodulation for Fiber-optic Sensors
(e.g. Temperature, Vibration and Stress sensors)
- Other Tests & Measurements

Specifications

Wavelength Tuning Range	8~10 nm (C-band)
Demodulation Frequency	0-1kHz (Customized)
Number of Channels	4/8/16 (Customized)
Default Sweep Step	10pm
Repeatability	Typ. < 2pm
Wavelength Resolution	0.1pm
Communication Interface	Ethernet/CAN/RS232 (Customized)
Gain Control	8 levels, per channel or per sensor, automatic or user controlled
Optical Adaptor	FC/APC (Other types available)
Operating Temperature	-30℃~+60℃
Dimensions	220mm*155mm*48mm

Interfaces

DC: 12~36 V/5A

Optical connector: FC/APC

Communication: Ethernet/CAN(restricted) /RS232(restricted)

POW power indicator, RUN operating status indicator: (Slow flashing for standby state / Fast flashing for demodulation state)



Communication Information

Communication Interface	
Ethernet	Ethernet (RJ45)
Default IP address	192.168.1.122(customized)
Default port	5000
Operation mode	TCPserver
Other interfaces	
CAN	CAN open (DB9 multiplex) Customized protocol
RS232	3-wire RS232(DB9 multiplex) Debugging and parameters setting
Baud rate	500000
Checker	None
Data bit	8
Stop bit	1
Flow control	None

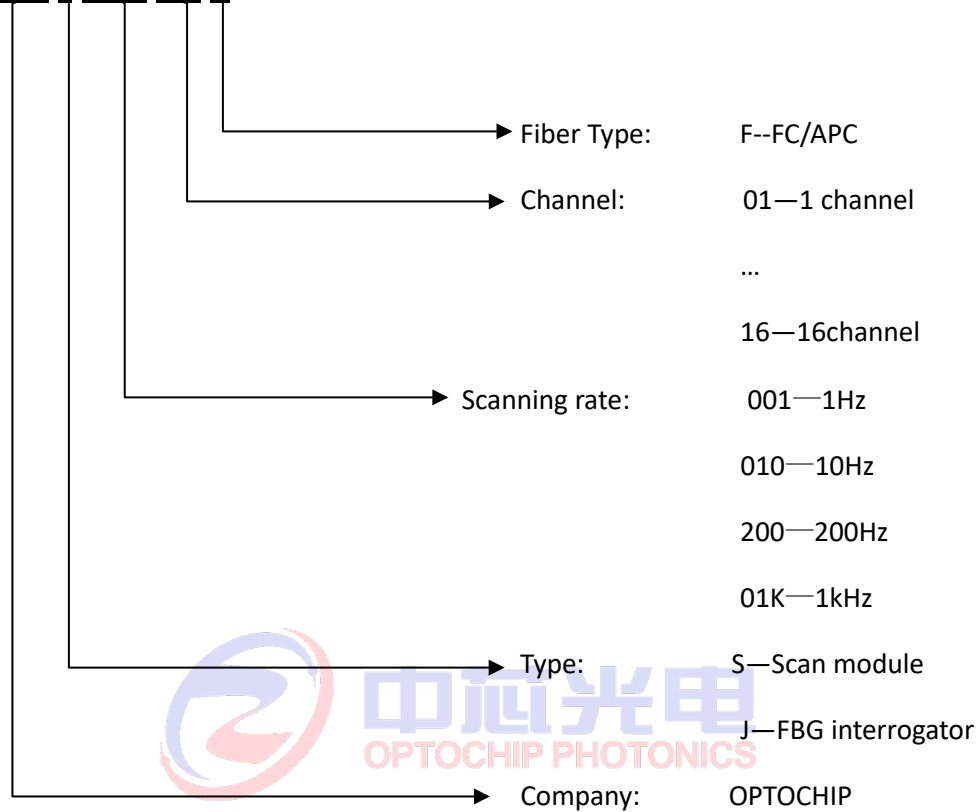
Product Checklist

Assembly	Quantity
FBG interrogator	1
CAT 5 network cable	1 (length:2m)
Power adapter	1
RS232 cable	1 (length:1m)
Random test report	1
Random USB flash drive (for User software)	1 (Demodulation software and its installation instruction for host PC)



Ordering information (Product serial number)

e.g.: O C J 200 XX F



Contact us

Address: B120, Block C, Qilu Software Park, No.1 Shunhua Road, Jinan High-tech District, Shandong Province, CN

Sales Manager: Mr Li

Tel: +86 0531-88761553

Email: Guoqing.li@optochip.cn