

FBG Interrogator, TS-WI-HS

Description

TS-WI-HS High speed fiber grating interrogator is a new generation wavelength signal demodulator developed by T&S for measuring high frequency physical quantity change. It serves as a collector of high speed, synchronous and high accurate data like strain, vibration, pressure and displacement from various FBG sensors. It's featured by excellent environmental adaptability, stability. The maximum sampling rate of a single channel is up to 5000Hz.



Specification

General Performance

Wavelength	1525 nm to 1565 nm
Optical Channel	1/4channel available
Wavelength Resolution	1 pm
Wavelength Repeatability	≤5 pm
Scanning Frequency	5000Hz
Communication Protocol	USB
Optical Interface	FC/APC
Operating Temperature	-25 °C to 55 °C
Dimension	256 mm×167 mm×68 mm

Safety Performance

Insulation resistance,Electrical strength and Impulse voltage	Compliant with GB 4943.1
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Environmental Adaptability

Low Temperature	Compliant with GB/T 2423.1
High Temperature	Compliant with GB/T 2423.2
Steady Damp-heat	Compliant with GB/T 2423.3

Impulse	Compliant with GB/T 2423.5
Collision	Compliant with GB/T 2423.6
Vibration (sine)	Compliant with GB/T 2423.10
Temperature Variation	Compliant with GB/T 2423.22

EMC Performance

Electrostatic Discharge Immunity	Compliant with GB/T 17626.2
Radiated, radio-frequency, Electromagnetic Field Immunity	Compliant with GB/T 17626.3
Electrical Fast Transient/Burst Immunity	Compliant with GB/T 17626.4
Surge Immunity	Compliant with GB/T 17626.5
Conducted Disturbance Immunity Induced by RF Field	Compliant with GB/T 17626.6
Power Frequency Magnetic Field Immunity	Compliant with GB/T 17626.8
Pulsed Magnetic Field Immunity	Compliant with GB/T 17626.9
Damped Oscillatory Magnetic Field Immunity	Compliant with GB/T 17626.10
Voltage dips, short interruptions and voltage variations immunity	Compliant with GB/T 17626.11
Ring Wave Immunity	Compliant with GB/T 17626.12
Limits and methods of Measurement	Compliant with GB 9254