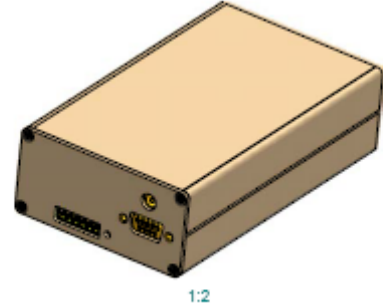


product datasheet

FTI-OEM Signal Conditioner STD



THE FTI-OEM-STD IS A FIBER OPTIC SIGNAL CONDITIONER FOR OEM APPLICATIONS. IT CAN BE USED WITH ALL FISO FIBER OPTIC SENSORS.

Key features

- Easily integrated into host system
- Convenient system Calibration
- Available in high volume
- High accuracy and fidelity
- Rugged and easy to use
- Voltage output and RS-232 communication port
- ST Connector

Applications

- Medical device component of in situ temperature monitoring systems:
- . MRI
- . Microwave ablation
- . Electro surgery applications
- . RF and EM related practices
- New product Development
- Research applications

FISO's fiber optic FTI-OEM-STD is designed to be used with all FISO fiber optic sensors (temperature, pressure, refractive index, strain and displacement).

All FISO sensors except the displacement sensor can be packaged without metallic part, when there is no metallic part in its composition the fiber optic sensor has complete immunity to microwave, EM and RF radiation with high temperature operating capability and it is intrinsically safety. Connected to the FTI-OEM-STD signal conditioner interface, the sensor is ready to provide accurate measurements.

Through the use of a white-light cross-correlator (US. Patents 5,392,117 and 5,202,939), the FTI-OEM-STD signal conditioner is capable of measuring the absolute cavity length of FISO's Fabry-Perot fiber optic sensors with astonishing accuracy, providing time after-time consistency in the most adverse conditions. The FTI-OEM-STD has a

0.01% full scale resolution (without averaging) and 0.025% of full scale precision.

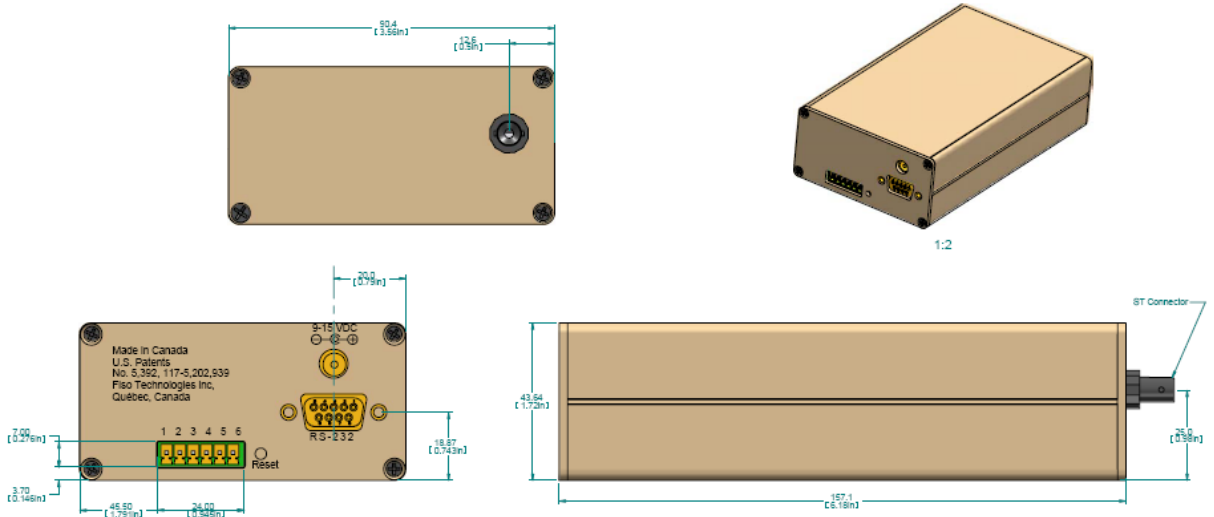
The FTI-OEM-STD signal conditioner has a non-volatile memory buffer that can store up to 50 000 data samples. Data-logging sequences, duration and other operational parameters are easily programmable through RS-232 remote control. The FTI-OEM-STD comes standard with an RS-232 communication port. The use of a Flash EEPROM allows the customer to easily upgrade the firmware.

Available in large volume, this signal conditioner is designed to convert the optical signal from FISO's fiber optic temperature sensors into engineering units. Readout interfaces are designed to be integrated into the customer's own system, or externally interfaced to existing monitor. Moreover, its modular design allows adaptation and perfect integration into the host system.

specifications

Number of channels:	One
Compatibility:	Compatible with all of FISO's fiber optic sensors (see sensors datasheets)
Connector:	ST
Precision:	+/-0.025% of full scale
Resolution:	0.01% of full scale
Dynamic range:	15 000 : 1
Sampling rate:	10Hz standard
Averaging:	1 to 500 samples
Data logging:	50 000 samples
Operating-mode:	RS-232 Software included Window& XP and 2000 compatible
Diagnostic functions:	Diagnostic through RS-232 communication link
Upgradeability - firmware:	Flash ROM upgradeable through R S-232
Analog inputs (optional):	+/-5 Volts (input impedance 1 Meg)
Light life expectancy:	~ 40 000 hours of continuous use (MTBF)
Weight:	PCB card: 300g
Dimensions (W x D x H):	PCB card 9 0 x 16 5 x 4 8 cm (118 DIN)
Power requirements:	1 W, 7-20V DC, ACIDC adapter included
Operating temperature:	-25°C to 60°C (without case)

FTI-OEM-STD Signal conditioner



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