Description

The T330 is a High Sensitivity Single-Mode (SM) Fiber based Fiber Bragg Grating (FBG) Accelerometer measuring to 2g and as low as 0Hz (near DC).

Available in a wide range of optical specifications. Packaged to eliminate influences from the ambient environment, the patented transducer mechanism yields a high sensitivity to resonance frequency ratio. Ready for direct use in many applications. Calibration service included. The T330 sensor handling and installation is fast, easy and intuitive. Delivers the advantages inherent to FBG based sensors. Immune to EMI.

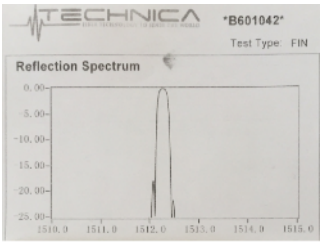
The T330 High Sensitivity Accelerometer can be customized upon request to fit a wide range of specifications. Inquire with us about our T330 in OEM fibers and OEM packaging.

The T330 is offered under International Licenses from Sylex and Raytheon Corporation.

Key Features

Detecting low level vibrations.

The T330 uses precision made FBGs written into the fibers' core and a patented packaging architecture for producing a transducer configuration that enables measurements down to 0 Hz (DC) without loss of sensitivity or phase flatness.



Built for High-Sensitivity measurements.

Our T330 High Sensitivity Accelerometer feature the sensitivity of 1350pm/g +/- 100pm/g expanding the portfolio of accelerometers offered by Technica (see T310 for High Shock and T320 for General Purpose versions available).

Rugged Design. The T330 High Sensitivity accelerometer is built using pitting and stress corrosion cracking resistant Duplex 1.4462 Stainless Steel with a double ended connection using 3mm reinforced cable. Able to be mounted on different surfaces using screws, or on our optional mounting block for 2D and 3D measurements. Inbuilt locking mechanism to prevent damage during transport, handling, and installation (see Note1 on Page 2). Made for monitoring of large structures, bridges, archways, overpasses, foundations, and for detecting earth tremors.

Ready to install as a single, double, or triple axes sensing system and can be daisy chained. Well suited for projects monitoring accelerations at one or many locations. Sensor body provides holes for mounting it on any of the three orthogonal axes. Delivered as double-ended connectorized sensors or in ready to install arrays of various lengths and number of accelerometers. Can also easily be integrated into a system containing various other types of FBG based sensors.

Parameter	Specifications
Wavelengths & Tolerance	1530-1570 nm, +/-0.5 nm; other
Reflection BW (FWHM)	0.1nm, other options
Reflectivity	> 20%
SLSR	> 15dB
Housing Material	D 1.4462 SS (AISI 318 LN)
Mounting Method	Screws or mounting block
Anchoring Bolt	M5 / 5Nm
Dimensions (without cable)	50 x 55 x 22mm
Weight (without cable)	400g
Cable type	3mm reinforced cable
Cable Length (pigtails)	1m
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type	FC/APC

Applications in Industrial, Structural Health Monitoring, Geotechnical, and R&D Labs

Technica undertakes a rigorous development process before products release. The company is also firmly committed to continuous improvements after release to insure performance to the highest standards, hence, specifications are subject to update without notice.

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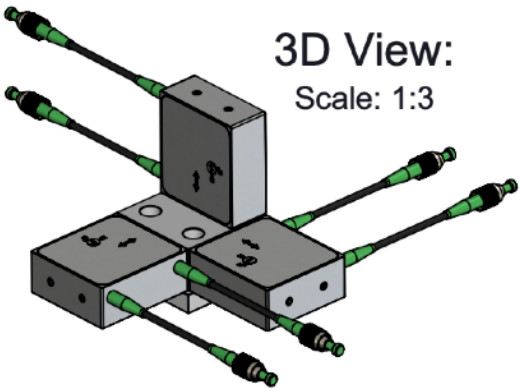
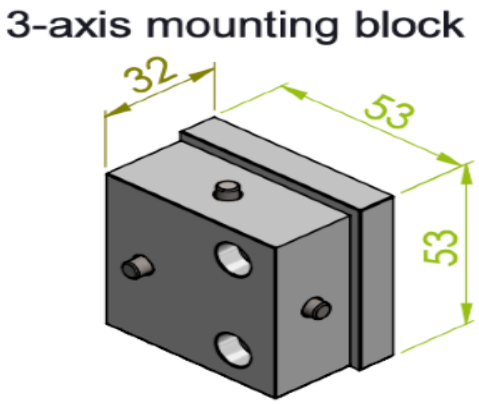
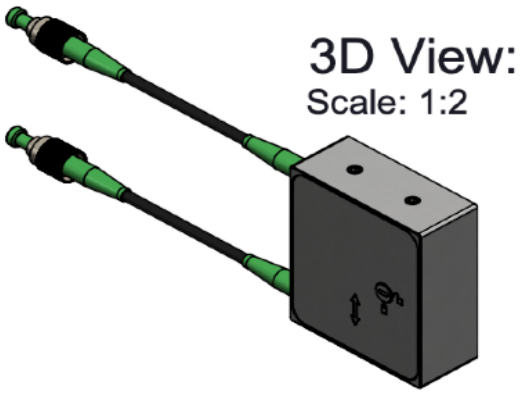
Performance Property	Specifications
Measurement Range	+/-2g (see Note 2)
Sensitivity	1350pm/g +/- 100pm/g
Maximum shock	10g
Frequency range	0 - 160Hz
Sensor Resonance	> 240Hz
Operating Temperature Range	-40°C to +60°C
Ingress Protection rating	IP 67

Note 1: The sensor needs to be unlocked before measurement.
Note 2: Installation of the sensor using the "Ceiling mount" will result in a range of -1 to +3g







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