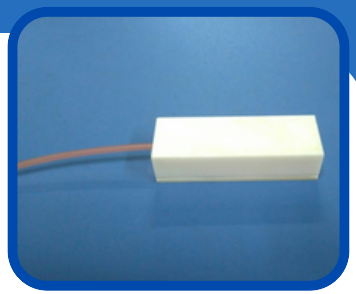
CIMES

Precision Sensing, Smart Monitoring

FIBER OPTIC ACCELEROMETER MODEL NO. FOA10-600NT



Features

- Non-conducting and non-magnetic material ,
- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators

Specifications

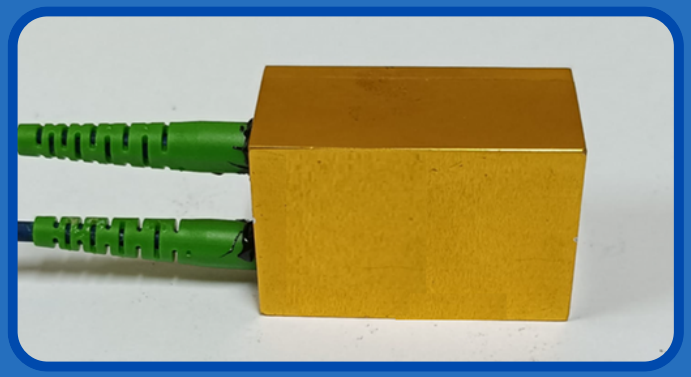
- Range: Acceleration 20 g (p) [Displacement 1000 µm (p-p) at 100 Hz]
- Resolution: Acceleration 0.2 g (p) [Displacement 10 µm (p-p) at 100 Hz]
- Frequency Range: 30 Hz to 500 Hz
- Temperature range: 85 Deg C
- With stands High Voltage : 50 KV
- Withstands Hydrogen pressure upto 5 Bar

Applications

- Vibration monitoring of stator end winding of electrical generators

TRL 7

FIBER OPTIC ACCELEROMETER MODEL NO. FOA120-510T



Features

- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators
- Temperature compensated

Specifications

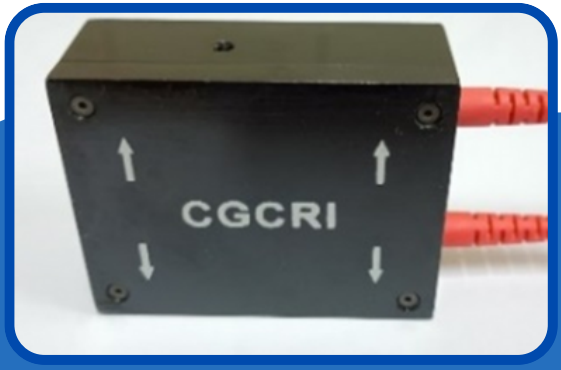
- Range: Acceleration 20 g (p)
- Resolution: Acceleration 0.01 g (p)
- Frequency Range: upto500 Hz
- Temperature range: 85 Deg C

Applications

- Structural health monitoring of buildings and bridges

TRL 6

FIBER OPTIC ACCELEROMETER MODEL NO. FOA1000-190T



Features

- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators
- Temperature compensated

Specifications

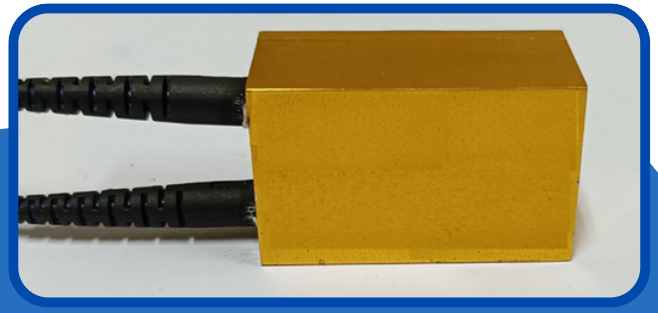
- Range: Acceleration 2 g (p)
- Resolution: Acceleration 0.001 g (p)
- Frequency Range: upto 160 Hz
- Temperature range: 85 Deg C

Applications

- Far Field Monitoring of blasting induced seismicity

TRL 5

FIBER OPTIC ACCELEROMETER MODEL NO. FOA25-1025T



Features

- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators
- Temperature compensated

Specifications

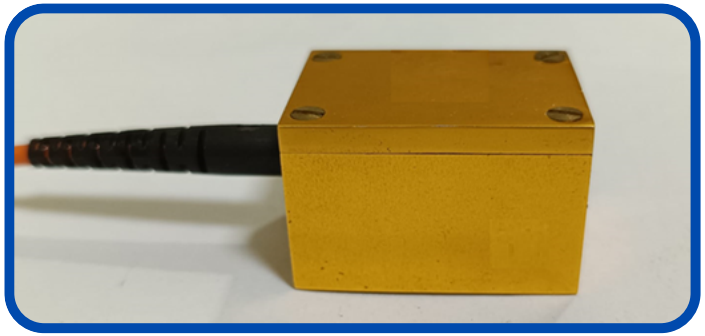
- Range: Acceleration 80 g (p)
- Resolution: Acceleration 0.04 g (p)
- Frequency Range: upto 1000 Hz
- Temperature range: 85 Deg C

Applications

- Near Field Monitoring of blasting induced seismicity

TRL 5

FIBER OPTIC ACCELEROMETER MODEL NO. FOA35-740NT



Features

- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators

Specifications

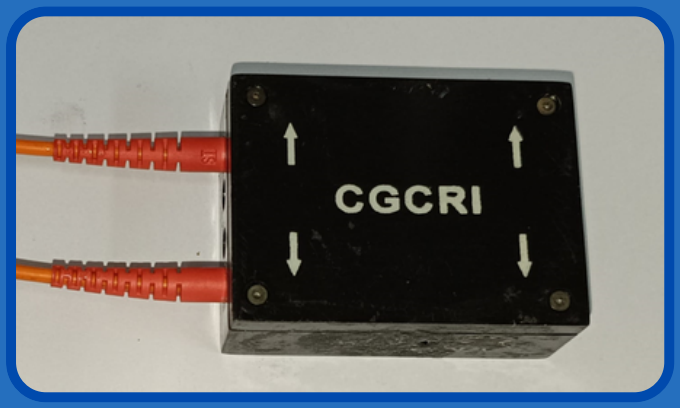
- Range: Acceleration 40 g (p)
- Resolution: Acceleration 1 g (p)
- Frequency Range: upto700 Hz
- Temperature range: 85 Deg C

Applications

- Monitoring of railway pantograph vibration

TRL 4

FIBER OPTIC ACCELEROMETER MODEL NO. FOA10-600NT



Features

- EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators
- Temperature compensated

Specifications

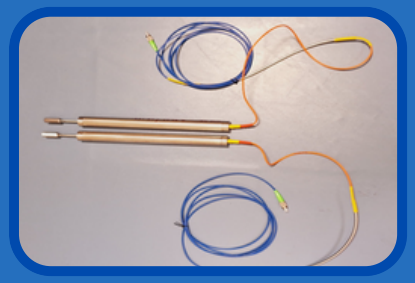
- Range: Acceleration 50 g (p)
- Resolution: Acceleration 0.025 g (p)
- Frequency Range: upto 800 Hz
- Temperature range: 85 Deg C

Applications

- Railway track monitoring

TRL 5

FIBER OPTIC DISPLACEMENT SENSOR MODEL NO. FDS-90



Features

- Non-conducting and non-magnetic material , EMI free
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators
- Surface mountable

Specifications

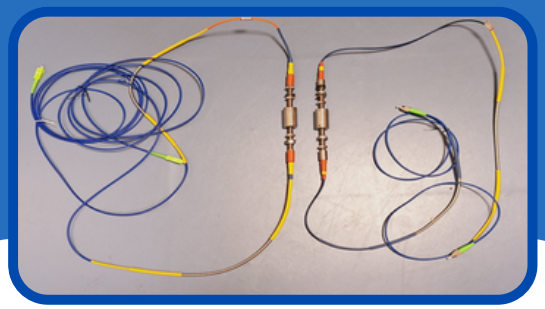
- Sensitivity :~ 44 pm/mm
- Accuracy :~ 200 µm
- Maximum displacement : 90 mm
- Total weight : < 700 gm
- Operational temperature range : -20 to +60 °C
- FBG sensing length : 4-5 mm
- Reflectivity : > 50 %
- Connector at end : FC/APC, SC/APC (1 meter)
- Ajustable displacement range at installation time : (0/+90mm, -30/+60mm, -45/+45mm, etc)

Applications

- Settling measurement, Crack monitoring and Borehole extensometer

TRL 7

FIBER OPTIC STRAIN SENSOR MODEL NO. FSS-SG-100



Features

- Non-conducting and non-magnetic material , EMI free
- Surface mountable (reusable with mount)
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators

Specifications

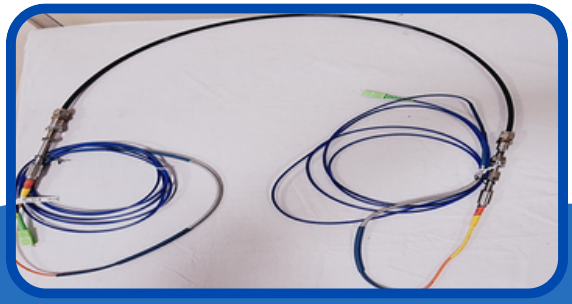
- Sensitivity :1.21 pm/ $\mu\varepsilon$
- Accuracy : <5 $\mu\varepsilon$
- Measurement range: 0- 5000 $\mu\varepsilon$.
- Gauge length: 100 mm
- Total weight : < 400 gm
- Operational temperature range : -20 to +60 °C
- FBG sensing length : 4-5 mm
- Reflectivity : > 50 %
- Connector at end : FC/APC, SC/APC (1 meter)
- Pre-tension during installation: -1000 to +4000 $\mu\varepsilon$, -2500 to +2500 $\mu\varepsilon$.

Applications

- Strain monitoring of concrete/steel bridge/ building

TRL 7

FIBER OPTIC STRAIN SENSOR MODEL NO. FSS-LG-1000



Features

- Non-conducting and non-magnetic material , EMI free
- Surface mountable (reusable with mount)
- Fiber Bragg grating (FBG) based sensor
- Wavelength multiplexed
- Optical data acquisition using standard wavelength based FBG interrogators

Specifications

- Sensitivity :1.21 pm/ $\mu\varepsilon$
- Accuracy : <5 $\mu\varepsilon$
- Measurement range: 0- 5000 micro-strain
- Gauge length: 1000 mm
- Total weight : < 300 gm
- Operational temperature range : -20 to +60 °C
- FBG sensing length : 4-5 mm
- Reflectivity : > 50 %
- Connector at end : FC/APC, SC/APC (1 meter)
- Pre-tension during installation: -1000 to +4000 $\mu\varepsilon$, -2500 to +2500 $\mu\varepsilon$.

Applications

- Strain monitoring of concrete/steel bridge and dam

TRL 7