



# Very High Temperature, Hazardous Area Approved Charge Accelerometer

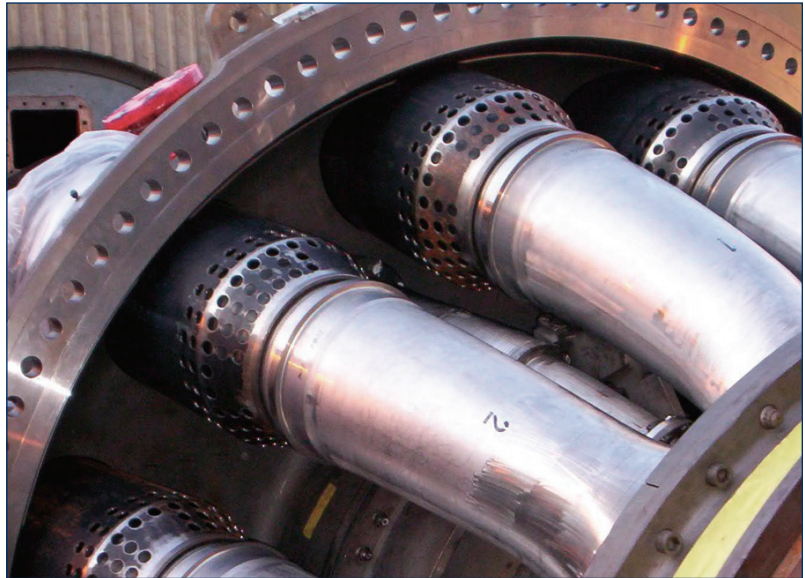
Designed for very high temperature environments with explosive gases or dusts.

## Highlights

- Extended low frequency response and high output sensitivity makes sensor ideal for measuring vibration of slow rotating machinery.
- Withstand very high temperatures with piezoelectric ceramic crystal and hermetically sealed, all-welded, super alloy housing.
- Operates in compression mode for extremely stable operation in temperatures up to +900 °F (+482 °C).
- Differential output for low noise measurements.

## Typical Applications

- Commissioning of Nuclear Power Plants
- Condition Monitoring of Turbines
- Machinery Protection in Extremely High Temperature Environments



IMI Sensors has developed a new Very High Temperature, Hazardous Area Approved Charge Accelerometer Model EX619A11 to be used in power generation vibration and other high temperature vibration monitoring applications. This new model can operate in temperatures up to 900 °F (482 °C) and can be paired with one of IMI Sensors' complementary differential charge amplifiers.

## Hazardous Area Approvals:

### CSA (Canada & US)

- AEx/Ex ic IIB T6... T510°C Gc Class I, Zone 2
- AEx/Ex ic IIB T6... T1 Class I, Division 2, Groups A, B, C, D
- AEx/Ex ia IIB T6... T510°C Ga Class I, Zone 0,
- AEx/Ex ia IIB T6... T1 Ga Class I, Division 1, Groups C, D
- AEx/Ex ia IIB T6... 200°C Ga Class II, Division 1, Groups E, F
- AEx/Ex ia IIB T6... 165°C Ga Class II, Division 1, Group G
- AEx/Ex ia IIB T6... T510°C Ga Class III

### ATEX

- Ex ia IIC T6... T510°C Ga
- Ex nA IIC T6... T510°C Gc

### IECEx

- Ex ia IIC T6... T510°C Ga
- Ex nA IIC T6... T510°C Gc



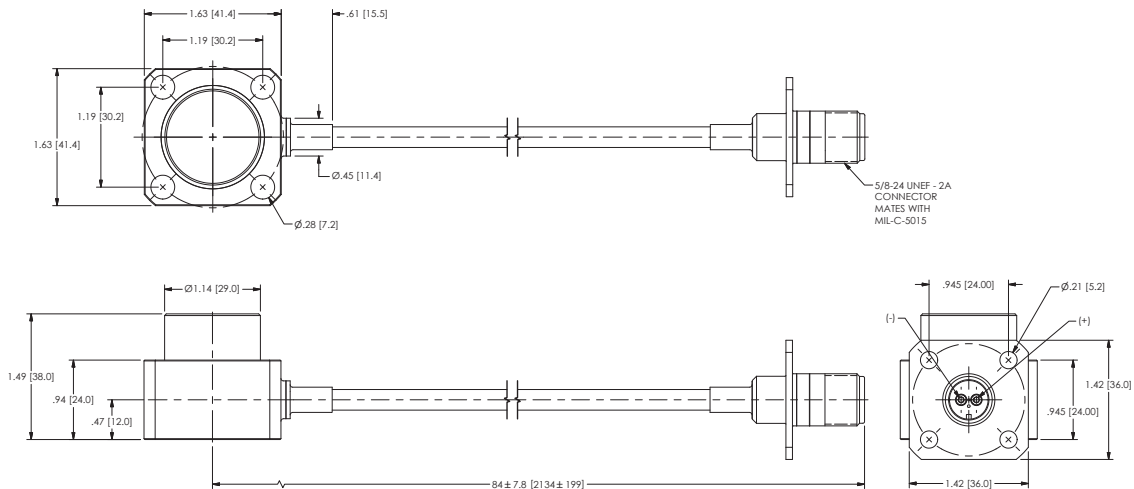
**Very High Temperature  
Charge Output Accelerometer**  
Model EX619A11

# Very High Temperature, Hazardous Area Approved Charge Accelerometer



## Technical Specifications

Model Number	EX619A11	Model Number	EX619A11
<b>Performance</b>		<b>Electrical</b>	
Sensitivity	50 pC/g 5.1 pC/(m/s <sup>2</sup> )	Capacitance (Pin to Pin)	1,525 pF
Measurement Range	±500 g ±4,905 m/s <sup>2</sup> pk	Capacitance (Pin to Case)	250 pF
Frequency Range (±5%)	Up to 3 kHz	Insulation Resistance (Pin to Case Room Temperature)	≥10 <sup>9</sup> ohm
Resonant Frequency	> 18 kHz	Insulation Resistance (Pin to Pin Room Temperature)	≥10 <sup>9</sup> ohm
Non-Linearity	±1%	Insulation Resistance (Pin to Pin +900 °F [+482 °C])	≥100 kohm
Transverse Sensitivity	<5%	Output Polarity	Differential
<b>Environmental</b>		<b>Physical</b>	
Overload Limit (Shock)	±2000 g pk ±19,620 m/s <sup>2</sup> pk	Sensing Element	Ceramic
Base Strain Sensitivity	0.033 g/με 0.32 (m/s <sup>2</sup> )/με	Sensing Geometry	Compression
Temperature Range (Operation)	-65 to +900 °F -54 to +482 °C	Housing Material	Nickel 600
Hazardous Area Approval	CSA	Sealing	Hermetic
	ATEX	Mounting	Through Four Holes
	IECEX	Mounting Torque	2 to 5 ft-lb 2.7 to 6.8 Nm
		Cable Length and Type	7ft MI Hardline 2.1m MI Hardline
		Cable Termination	1.49 x 1.63 x 1.63 in 38.0 x 41.4 x 41.4 mm
		Size	23 x 40 x 40 mm
		Weight (With Cable)	19.4 oz 550 gm



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**ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025**

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