

Model Number
628F11

PRECISION QUARTZ INDUSTRIAL ICP® ACCELEROMETER

Revision: F
ECN #: 56599

Performance

	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s ²)	[1]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 5 %)	60 to 240,000 cpm	1 to 4,000 Hz	[2]
Frequency Range(± 10 %)	40 to 390,000 cpm	0.67 to 6,500 Hz	
Frequency Range(± 3 dB)	20 to 720,000 cpm	0.33 to 12,000 Hz	
Resonant Frequency	1,080 kcpm	18 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	1,000 µg	9,810 µm/sec ²	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

Environmental

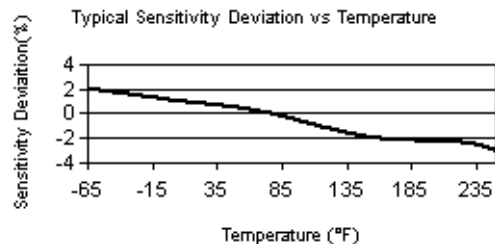
Overload Limit(Shock)	5,000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	

Electrical

Settling Time(within 1% of bias)	≤ 10 sec	≤ 10 sec	
Discharge Time Constant	≥ 0.5 sec	≥ 0.5 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 100 Ohm	< 100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	50 µg/√Hz	491 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	20 µg/√Hz	196 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	6 µg/√Hz	59 (µm/sec ²)/√Hz	[3]
Electrical Protection	RF/ESD	RF/ESD	
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	

Physical

Size (Hex x Height)	7/8 in x 4.3 in	22 mm x 109 mm	
Weight(without cable)	3.3 oz	94 gm	
Mounting Thread	1/4-28 Female	Not Applicable	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Top	Top	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[6]



OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

EX - Hazardous Area Approval- contact factory for specific approvals

Hazardous Area Approval	EEx ia IIC T4, - 54°C ≤ Ta ≤ 121°C, II 1 G	EEx ia IIC T4, - 54°C ≤ Ta ≤ 121°C, II 1 G
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LB - Low Bias Voltage

Output Bias Voltage	6 to 8 VDC	6 to 8 VDC
Excitation Voltage	12 to 28 VDC	12 to 28 VDC
Measurement Range	± 35 g	± 343 m/s ²

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

NOTES:

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] Twisted shielded pair.
- [7] See PCB Declaration of Conformance PS023 or PS061 for details.
- [8] See Model's "Instructions For Use" (IFU) for North American Conformity and Certification Statements.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency



All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
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Entered: ND	Engineer: gs	Sales: JL	Approved: BAM	Spec Number:
Date: 05/19/2026	Date: 05/19/2026	Date: 05/19/2026	Date: 05/19/2026	8313

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