

PERFORMANCE – SYSTEM

Expanded Measurement Uncertainty			[0]
0.25 to 0.5 Hz	%	3.0	[1]
0.5 to 1.0 Hz	%	1.1	[1]
1.0 to 10 Hz	%	0.8	[1]
10 to 100 Hz (ICP Reference Accelerometer Only)	%	1.0	[1]

LONG-STROKE AIR BEARING SHAKER

Manufacturer/Model	TMS	2129F025	[2]
Frequency Range	Hz	0.1 to 200	
Maximum Acceleration			
0.1 to 0.25Hz	g _{pk}	0.005 to 0.032	[3]
0.25 to 0.5 Hz	g _{pk}	0.032 to 0.128	[3]
0.5 to 1.0 Hz	g _{pk}	0.128 to 0.51	[3]
1.0 to 10 Hz	g _{pk}	0.51 to 2	[3]
Maximum Displacement	in _{pk-pk} (mm _{pk-pk})	10 (255)	
Maximum Payload	kg	2	

REFERENCE OPTICAL ENCODER

Scale Tape Pitch	μm	20	
Measurement Resolution	nm	10	
Scale Linearity	μm/m	+/- 3	
Scale Thermal Sensitivity	ppm/K	10	[5]

ICP® REFERENCE ACCELEROMETER

Manufacturer/Model	PCB Piezotronics	301M26	[2]
Sensitivity (+/- 10%)	mV/g	500	
Low Frequency Range (-5%)	Hz	0.035	
Sensing Element Material		Quartz	
Discharge Time Constant	sec	>15	
Broadband Resolution	mg rms	0.15	

ICP® VERIFICATION ACCELEROMETER

Manufacturer/Model	PCB Piezotronics	Q353B51	[2][4]
Sensitivity (+/- 5%)	mV/g	500	
Low Frequency Range (-5%)	Hz	0.1	
Sensing Element Material		Quartz	
Discharge Time Constant	sec	>10	
Settling Time	sec	>300	
Broadband Resolution	mg rms	0.4	

All specifications are at room temperature unless otherwise specified.

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*In the interest of constant product improvement, specifications may change without notice.***MISCELLANEOUS**

9155D-779 available as option to 9155D system, includes 2129F025 Long-stroke shaker with integrated optical encoder reference sensor hardware for calibrations from 0.1 to 10 Hz. The 779 option also includes a reference sensor for back-to-back calibrations from 10-200 Hz.

9155D-779 software provides seamless integration of low-frequency data acquired with optical displacement reference and mid-frequency data acquired with accelerometer reference. Higher frequency data may be included using alternative shaker hardware such as supplied with the 9155D-830C/831 air bearing shaker option.

NOTES:

- [0] Uncertainty below 0.25 Hz, above 100 Hz, is undefined.
[1] Per ISO with k=2 coverage factor using Q353B51.
[2] See manufacturer data for full specifications.
[3] At max displacement 10 in_{pk-pk}, max acceleration level dependent on payload.
[4] Q prefix for extended discharge time constant.
[5] Nominal.

SUPPLIED ACCESSORIES:

PCI Data Acquisition Card
Shielded Connector Block
PCIe Ethernet Card
Verification Accelerometer
Reference Accelerometer

Project Engineer:

JLS

Product Manager:

MND

Mkt Team Leader:

DEG

Spec Number:

PS-0079

Date: 6/22/26

Date: 7/14/26

Date: 7/14/26