

Acoustics, Ultrasound and Vibration, Chinese TAIPEI, CMS (Center for Measurement Standards)

Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty						
Quantity	Instrument or Artifact: Measurand	Instrument Type or Method	Minimum value	Maximum value	Units	Parameter	Specifications	Value	Units	Coverage Factor	Level of Confidence	Is the expanded uncertainty a relative one?	NMI Service Identifier	Comments
Pressure sensitivity level	Measurement microphone type: IEC 61094-1 LS1P, LS2aP and LS2F	IEC 61094-2			dB (reference: 1 V/Pa)	Frequency	63 Hz to 6.3 kHz	0.06	dB	2	95%	No	A-01	
Pressure sensitivity level	Measurement microphone type: IEC 61094-1 LS and IEC 61094-4 WS	IEC 61094-5			dB (reference: 1 V/Pa)	Frequency	250 Hz	0.08	dB	2	95%	No	A-02	
Pressure sensitivity level	Measurement microphone type: IEC 61094-1 LS2, IEC 61094-4 WS2	IEC 61094-5			dB (reference: 1 V/Pa)	Frequency	100 Hz to 6.3 kHz	0.08	dB	2	95%	No	A-02	
Sound pressure level	Pistonphone or sound calibrator	Sound pressure level by insert-voltage	90	130	dB (reference: 20 µPa)	Frequency	250 Hz and 1 kHz	0.08	dB	2	95%	No	A-03	
Sound pressure level	Pistonphone or sound calibrator	Sound pressure level by comparison	90	130	dB (reference: 20 µPa)	Frequency	250 Hz and 1 kHz	0.1	dB	2	95%	No	A-03	
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	0.5 m/s ² to 5 m/s ²	3.2	%	2	95%	Yes	V-04	
						Frequency	0.8 Hz and 1 Hz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	0.5 m/s ² to 5 m/s ²	0.90	%	2	95%	Yes	V-04	
						Frequency	2 Hz and 3.15 Hz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	0.5 m/s ² to 5 m/s ²	0.37	%	2	95%	Yes	V-04	
						Frequency	5 Hz to 40 Hz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	5 m/s ² to 100 m/s ²	0.50	%	2	95%	Yes	V-01	
						Frequency	50 Hz to 200 Hz							

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Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	5 m/s ² to 100 m/s ²	1.5	%	2	95%	Yes	V-01	
						Frequency	300 Hz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by fringe-counting method			V/(m/s ²)	Acceleration	5 m/s ² to 100 m/s ²	1.1	%	2	95%	Yes	V-01	
						Frequency	315 Hz to 700 Hz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by sine-approximation method			V/(m/s ²)	Acceleration	5 m/s ² to 100 m/s ²	0.60	%	2	95%	Yes	V-01	
						Frequency	50 Hz to 4 kHz							
Voltage sensitivity (magnitude)	Acceleration measuring chain	ISO 16063-11 interferometry by sine-approximation method			V/(m/s ²)	Acceleration	5 m/s ² to 100 m/s ²	1.8	%	2	95%	Yes	V-01	
						Frequency	5 kHz to 10 kHz							
Charge sensitivity (magnitude)	Accelerometer	Comparison, ISO 5347-3			pC/(m/s ²)	Frequency	100 Hz and 160 Hz	3.8	%	2	95%	Yes	V-02	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V/(m/s ²)	Frequency	0.8 Hz to 3.15 Hz	3.4	%	2	95%	Yes	V-04	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V/(m/s ²)	Frequency	5 Hz	1.9	%	2	95%	Yes	V-04	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V/(m/s ²)	Frequency	6.3 Hz to 40 Hz	1.5	%	2	95%	Yes	V-04	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V/(m/s ²)	Frequency	50 Hz to 4 kHz (except at 100 Hz, 200 Hz, and 3 kHz)	2.4	%	2	95%	Yes	V-02	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V / (m/s ²)	Frequency	100 Hz	3.1	%	2	95%	Yes	V-02	

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Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V / (m/s ²)	Frequency	200 Hz	4.0	%	2	95%	Yes	V-02	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V / (m/s ²)	Frequency	3 kHz	2.9	%	2	95%	Yes	V-02	
Voltage sensitivity (magnitude)	Acceleration measuring chain	Comparison, ISO 5347-3			V / (m/s ²)	Frequency	5 kHz to 7 kHz	3.2	%	2	95%	Yes	V-02	
Shock sensitivity (voltage, magnitude)	Acceleration measuring chain	Comparison, ISO 5347-4			V/(m/s ²)	Peak value	1000 m/s ² to 10000 m/s ²	3.0	%	2	95%	Yes	V-03	Approved on 04 September 2006