PU IMPEDANCE
GEN 2



PRODUCT DATA

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PU IMPEDANCE GEN 2

PURPOSE-BUILT FOR NEAR-FIELD MATERIAL CHARACTERIZATION

The PI Generation 2 is a compact acoustic probe designed for the Near Field Material Tester. Combining sound pressure and particle velocity sensing at virtually the same position, the probe enables direct measurement of the acoustic properties of materials and surfaces.

Designed for reliable and repeatable in-situ measurements, the PI Generation 2 provides the acoustic information needed to determine surface impedance, sound absorption and reflection coefficients. Its compact construction and integration with the Near Field Material Tester make it suitable for non-destructive material characterization in both laboratory and real-world testing environments.



PI GEN 2 AT A GLANCE

- Purpose-built for the Near Field Material Tester
- Simultaneous sound pressure and particle velocity measurement
- Sensor centered within the measurement geometry
- Integrated 4-pin connection to the measurement arm
- Compatible with the Microflown Field Calibrator
- Designed for fast and repeatable near-field material measurements

TYPICAL APPLICATIONS

- Near-field acoustic material characterization
- Sound absorption measurements
- Reflection coefficient measurements
- Complex surface impedance measurements
- Point-based and spatial material testing

SPECIFICATIONS

SENSOR PERFORMANCE

Parameter	Sound Pressure | Particle Velocity	Unit
Sensitivity	20 | 10	mV/Pa / V/(m/s)
Frequency range (±1 dB)	80–8,000 | 80–8,000	Hz
Frequency range (±2 dB)	20–10,000 | 20–10,000	Hz
Maximum level	130 | 130	dB
Noise floor (20 Hz–2 kHz)	26 | 35	dB(A)
Noise floor (20 Hz–10 kHz)	29 | 43	dB(A)

ENVIRONMENTAL

Parameter	Sound Pressure | Particle Velocity	Unit
Temperature range	-20 to 85 | -20 to 85	°C
Temperature coefficient	0.015 | 0.006	dB/°C
Influence of humidity (30–90%)	0.001 | 0.06	dB/%RH
Static pressure coefficient	<0.5 | <0.5	dB/kPa
Maximum airflow	0.5 | 0.5	m/s

PHYSICAL DIMENSIONS

Parameter	Sound Pressure | Particle Velocity	Unit
Connector type	4-pin LEMO	°C
Diameter	7,6	mm
Length	88,5	mm



