

# PU MATCH .....

## SOUND INTENSITY PROBE



### PRODUCT DATA



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Charting sound fields



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# PU MATCH . . . . .

## 1D SOUND INTENSITY PROBE

### SMALL YET POWERFUL, HIGH SPATIAL RESOLUTION SOUND ANALYSIS

The PU Match, the smallest addition to the PU family is packed with all the abilities of the PU Regular to measure sound pressure and particle velocity physically at the same point in one compact probe. Optimized design of the PU Match allows it to handle measurements that demand high spatial resolution but has space limitations. Give your product an edge by unleashing the

complete potential of a PU probe to visualize & localize your sound sources. The sensor is applicable in wide range of scenarios like reverberant conditions, closed cavities e.g. vehicle interiors, to carry out measurements to study the sound field, localize the sound sources or the contribution to a particular position.

### THE PU MATCH AT A GLANCE

- Covers a relevant and broad range of 20 Hz - 10kHz
- Sound pressure and the one-dimensional component of particle velocity vector
- Compact design enabling high spatial resolution
- Sound intensity/power estimations directly from the same measurement
- Less dependent on environmental conditions

### TYPICAL APPLICATIONS

- Noise source identification & mapping
- Sound ranking
- Sensor array applications
- Range of acoustic quantities: Sound Intensity, Sound Power, PVL measurements
- Acoustic impedance & absorption

# SPECIFICATIONS

## SENSOR PERFORMANCE

Parameter	Sound Pressure   Particle Velocity	Unit
Sensitivity	20   10	mV/Pa   V/(m/s)
Frequency Range ( $\pm 1$ dB)	80 - 8,000	Hz
Frequency Range ( $\pm 2$ dB)	20 - 10,000	Hz
Maximum level	130   130	dB
Noise floor (20-2k Hz)	26   35	dB(A)
Noise floor (20-10k Hz)	29   43	dB(A)

## ENVIRONMENTAL

Parameter	Sound Pressure   Particle Velocity	Unit
Temperature Range	-20 to 85	$^{\circ}$ C
Temperature Coefficient	0.015   0.006	dB/ $^{\circ}$ C
Influence of Humidity (30 - 90%)	0.001   0.06	dB/%RH
Static Pressure Coefficient	< 0.5	dB/kPa
Maximum airflow	0.5	m/s

## PHYSICAL DIMENSIONS

Parameter	Value	Unit
Connector type	4 pin	LEMO
Weight	5	g
Diameter	7	mm
Length	58.7	mm

# SPECIFICATIONS .....

## PHYSICAL DIMENSIONS

