

Tri-axial Accelerometer

HDBV-1000

HIGH SENSITIVITY

Measurement of low level and low frequency vibrations

SUITABLE FOR DIFFERENT APPLICATIONS

human exposure to whole-body vibrations as well as for the measurement of building vibrations

RELIABLE SIGNAL TRANSMISSION

CCP Constant Current Power supply (Compatible IEPE/ICP electrical interface)
Possibility to connect with long cables

EASY TO COMBINE

Compatibility with any vibration analyzer having CCP electrical interface

RUGGED AND STABLE DESIGN

Optional heavy support suitable for the measurement of vibrations transmitted by floors and other vibrating surfaces



MAIN APPLICATIONS

Measurement of vibrations in buildings for comfort evaluations

Laboratory measurements

Technical Specification

Sensing element	MEMS inertial sensors
Number of axis	3

PERFORMANCE

Sensitivity @ 15.915 Hz	1 V/(m/s ²)
Range F.S.	± 5 m/s ²
Frequency response (f3dB)	0.2 Hz ÷ 400 Hz
Frequency response (f10%)	0.4 Hz ÷ 300 Hz
Frequency response (f5%)	0.6 Hz ÷ 200 Hz
Resonant frequency (MEMS transducer)	> 5 kHz
Linearity error (FSO)	± 0.5 %
Transverse sensitivity	< 5%
Residual noise (0.4 Hz ÷ 100 Hz)	< 2 mm/s ²
Residual noise (Wm ISO 2631-2)	< 1 mm/s ²

ELECTRICAL

Output	CCP (IEPE/ICP compatible)
Compliance (supply) voltage range	+18 to +28 V

Constant current supply	2 mA ÷ 4 mA
Output bias voltage	12 V ÷ 14 V
Output impedance	100 ohm
Ground isolation	Case grounded

ENVIRONMENTAL

Shock limit	1000 G
Operating temperature range	-20°C ÷ 60°C
Temperature coefficient	0.01 %/°C
Protection rating	IP65
Residual noise (0.4 Hz ÷ 100 Hz)	< 2 mm/s ²
Residual noise (Wm ISO 2631-2)	< 1 mm/s ²

PHYSICAL

Weight	50 g
Size	71 mm diameter, 12mm height
Mounting	10-32 tapped hole
Connector	4-pin M5
Material	Anodized aluminum