ACM-1000: MEMS DIGITAL OUTPUT VIBRATION SENSOR



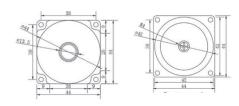
■ PRODUCT DESCRIPTION

The ACM-1000 vibration sensor is independently developed and produced by MXMW Hi-Tech Company, using digital filtering technology to effectively reduce measurement noise and improve measurement accuracy. It can be applied to multiple fields such as vibration testing, impact testing, and impact testing. The product consists of a monocrystalline silicon capacitive sensor, a temperature sensor, and a solid-state power supply (overvoltage protection); The design features sturdy structure, low power consumption, and excellent deviation stability, ensuring output reliability.

■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	ACM-1000
Measuring Axis		X, Y, Z (optional)
Accuracy	Vibration velocity	1mm/s
	Vibration angle	0.001°/s
	Vibration amplitude	0.001mm
	Vibration frequency	1HZ
Temperature calibration	-40-85℃	
Measurement range	Vibration velocity (0-50mm/s), Vibration angle (0-180 °),	
	Vibration amplitude (displacement 30mm), Vibration frequency (1-100Hz)	
Resonance frequency	2.4K HZ	
Bandwidth (3DB)	500HZ	
Detection cycle	<100HZ	
Cut-off frequency	<100HZ	
Output rate	5Hz, 15Hz, 35Hz, 50Hz can be set	
	(RS485 does not have this function)	
Output signal	RS232/RS485/RS422/TTL optional	
MTBF	≥ 45000 hours/time	
Impact resistance	20000g, 2ms, 1/2sine	
Anti-vibration	10grms、 10 ~ 1000Hz	
Waterproof level	IP67	
Cable	Standard 1.5m leng	th, wear-resistant, oil-proof, wide temperature,
	shielded cable 5*0.2mm2	
Weight	65g (excluding packaging box)	

PRODUCT DIMENSION



SIZE: L44*W44*H33MM

PRODUCT APPLICATION

Vibration
measurement of
mechanical bearings

 Bridge and building vibration measurement

Free fall

– Roller

Fans and generators

Railway track monitoring

 Roadbed analysis and high-speed railway fault detection