ACM-300:   MEMS VOLTAGE OUTPUT TYPE TRI-AXIS ACCELEROMETER
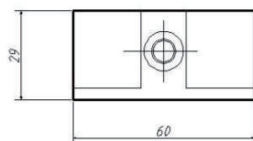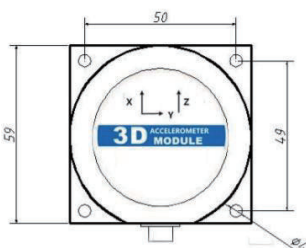
■ **PRODUCT DESCRIPTION**

The ACM-300 tri-axis accelerometer is a widely used acceleration sensor series product produced by MXMW Hi-Tech Company with Swiss patented technology, which can be used in various fields such as vibration testing and impact testing. The product adopts output interface with 0~5V and 0~10V. Different address codes can be set, and multiple sensors can be connected in series for long-distance measurement and data analysis at multiple points. ACM-300 is a single crystal silicon capacitive sensor, consisting of a silicon chip that has undergone micro mechanical processing, a low-power ASIC for signal adjustment, a microprocessor for storing compensation values, and a temperature sensor.

■ **PRODUCT MAIN SPECIFICATION**

Parameter	Conditions	ACM-300-2	ACM-300-8	ACM-300-40	Unit
Measuring range		±2	±8	±40	g
Bias calibration		<10	<50	<150	mg
Measuring axis	axis	X, Y, Z	X, Y, Z	X, Y, Z	
Zero bias stability (yearly)		1.5(<5)	7.5(<25)	22(<75)	mg
Resolution threshold	@Hz	<1	<5	<15	mg
Bias temperature coefficient	-55 ~ 100°	0.1	0.5	1.5	mg/℃
Bandwidth		0~≥400	0~≥400	0~≥400	Hz
Resonance frequency		1.6	6.7	6.7	KHz
Scale factor temperature coefficient		100	100	100	ppm/℃
		-50/250	-50/250	-50/250	max/min
Output signal		0~5V, 0~10V optional			
Reliability		MIL-HDBK-217, Level 2			
Impact resistance		20000g, 2ms, 1/2sine			
Anti-vibration		10grms、10 ~ 1000Hz			
Waterproof level		IP67			
Cable		Standard 1.5m length, wear-resistant, oil-proof, wide temperature, shielded cable 6*0.3mm2			
Weight		180g (excluding packaging box)			
Connector		6-pin aviation plug			
Capacitive loading		1000			

■ **PRODUCT DIMENSION**

SIZE: L60*W59*H29MM

■ **PRODUCT APPLICATION**

- Unmanned aerial vehicles
- Ship navigation attitude measurement
- Crash records, fatigue monitoring and prediction
- Satellite solar antenna positioning
- Transportation system monitoring
- Roadbed analysis and high-speed railway fault detection