

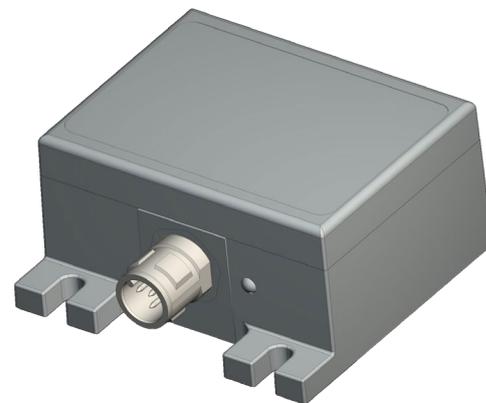
M-A552AC1x

Accelerometer Sensor Unit CAN Interface

■ GENERAL DESCRIPTION

The M-A552 is a three-axis digital output accelerometer featuring ultra-low noise, high stability, and low power consumption using fine processing technology of Quartz. Incorporating both high accuracy and durability, the versatile M-A552 is well suited to a wide-range of challenging applications such as SHM, seismic observation, condition monitoring for industrial equipment, and pose detection for industrial machinery (i.e. construction machinery/attachments, agricultural machinery/ implements, robots).

The M-A552 is packaged in a water-proof and dust-proof metallic case supporting CAN bus interface. This ruggedized unit is suitable for industrial use that requires remote mounting, long-distance wiring, and/or simplified development of a multi-node measurement system that requires accurate synchronization performance for the multiple units.



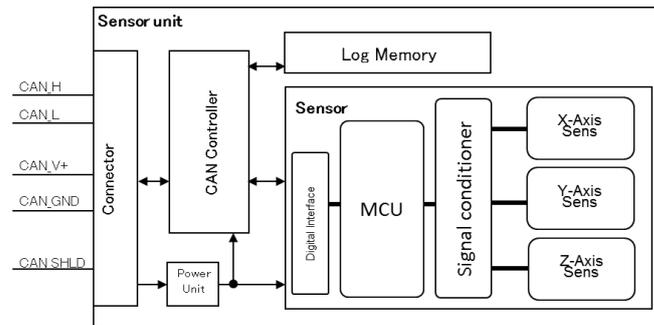
■ FEATURES

Item	Specification	Note
Sensor		
Integrated sensor	Model: M-A552AC1x Internal sensor M-A352 Detection range $\pm 15G$ Initial Bias error $\pm 4mG(@25^{\circ}C)$ Resolution 0.06 μG Low noise 0.5 $\mu g/\sqrt{Hz}$ typ Selectable output format: Acceleration / Tilt Angle Programmable low-pass digital filters	
Interface		
Protocol	CANopen	
Physical layer	ISO11898-2 (High speed CAN)	
Data Link layer	ISO11898-1 (High speed CAN)	
Frame format	CAN2.0A	
Profile	DS-301	Standard profile
	DS-404	Device profile for measuring devices
Structures	DS-303-1	5pin "micro"Connector
	DS-303-2	SI unit
	DS-303-3	LED
Bit rate	1M/ 800k/ 500k/ 250k/ 125k/ 50k/ 20k/ 10k bps	1Mbps (Default setting)
Node-ID	1 to 127	1 (default setting)
Sampling rate	Max 1,000 sps (Timer event mode) / 500sps (Sync mode)	Selectable
Other function		
Indicator	Run-LED (Green)/ Error-LED (Red)	Accordance with DS-303-3
Terminator	Not included	A terminator should be attached to the network.

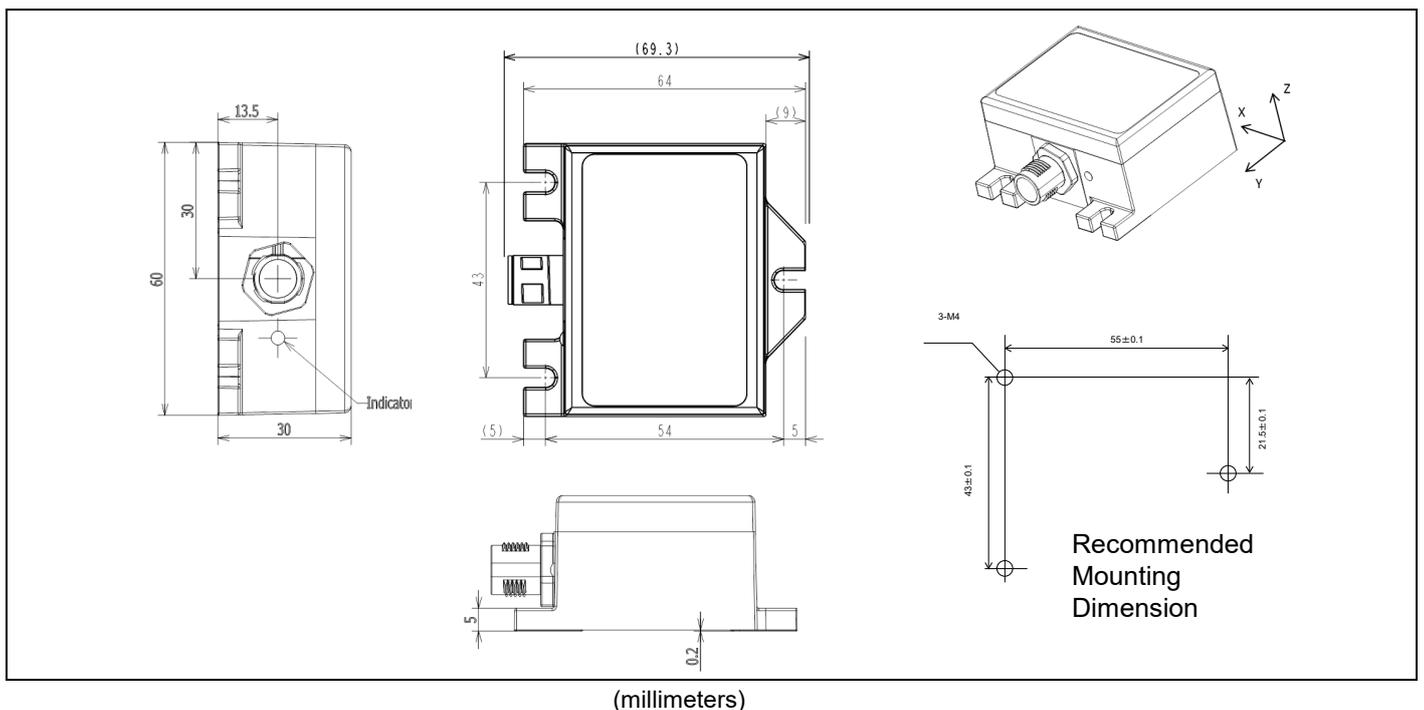
M-A552AC1x

Item	Specification	Note
General characteristics		
Voltage supply	9 to 32 V	
Power consumption	35 mA typ	Vin=12V
Operating temperature range	-30 to +70°C	
External dimension		
Outer packaging	Overall metallic shield chassis	
Size	65 x 60 x 30mm (Including projection.)	
Weight	128g	
Interface connector	CAN connector: 5-pos, M12, water-proof	
Water-proof, Dust-proof:	Corresponds with IP67	
Regulation		
CE	CE marking (EN61326/RoHS Directive)	Class A
USA	FCCpart15B	Class A

■ BLOCK DIAGRAM



■ OUTLINE DIMENSION



M-A552AC1x

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