



LORD Sensing Quick Start Guide

MV5-AR & ML5-AR

CAN Bus Attitude Reference and Gyro Stabilized Inclinometers

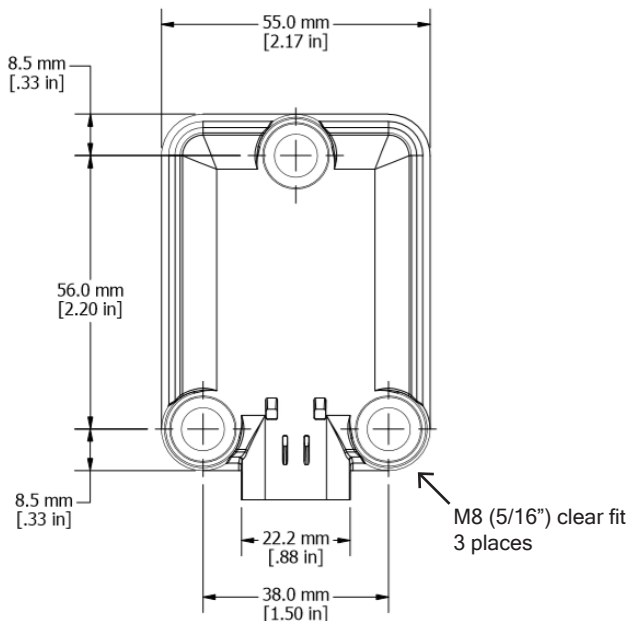
Congratulations on your purchase of the LORD Sensing M-Series gyro stabilized inclinometer. Your unit's compact, robust package and high MTBF are designed to withstand the most difficult operating environments, and deliver consistent high-precision data.

ABOUT THIS GUIDE

This QSG contains only the essential information to install and connect to the sensor. Refer to the J1939 or CANopen product manual for full details and protocol information. These, along with a .DBC file can be found on the LORD Sensing website. Select your model, and scroll down to documentation for the user manual, or downloads for the CAN J1939 Configuration file. www.microstrain.com/inertial/m-series.

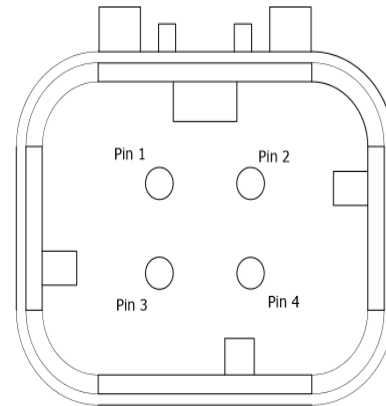
MOUNTING THE SENSOR

After identifying the desired mounting location on the vehicle, and verifying proper clearances, mount the sensor using M8 or 5/16" machine screws, in the three clear fit holes provided. For temporary installation to verify clearances, 3M VHB double faced tape is recommended. Torque the screws to $20\text{Nm} \pm 2\text{Nm}$ (14.75 ft-lbs $\pm$ 1.47 ft-lb.)



CONNECTING TO THE SENSOR

The mating connector for the M Series sensors is an AMPSEAL 16 Series, with gold plated pins.



Connector Termination

Pin	Description
1	DC Power
2	CAN High
3	DC Return
4	CAN Low



M-Series Sensor Quick Start Guide

LORD Sensing suggests two USB interface dongles for CAN connectivity.

Suggestion 1

Customers with existing CAN networks who wish to verify communications with a specific sensor may utilize this unit from Peak-System GmbH.

It comes complete with communications monitor software, PCAN-View. For full details and ordering information: peak-system.com.

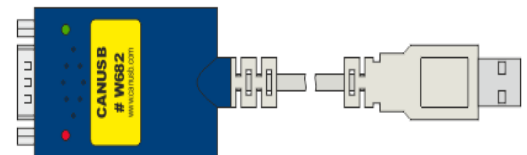
LORD Sensing Sales (sensing_sales@lord.com) has a CAN cable and power kit to facilitate quick test operation. Ask for p/n 6212-3017.



Suggestion 2

An alternative, and somewhat less expensive interface is manufactured by Lawicel-AB. The CANUSB interface is a small dongle which provides instant CAN connectivity. It can be identified by software as a virtual COM port, with the FTDI USB drivers.

Sample programs in C, C++, C#, VB6, Delphi and Linux are found on their downloads page: http://www.can232.com/?page_id=75. Purchase directly from Lawicel CANUSB.com.

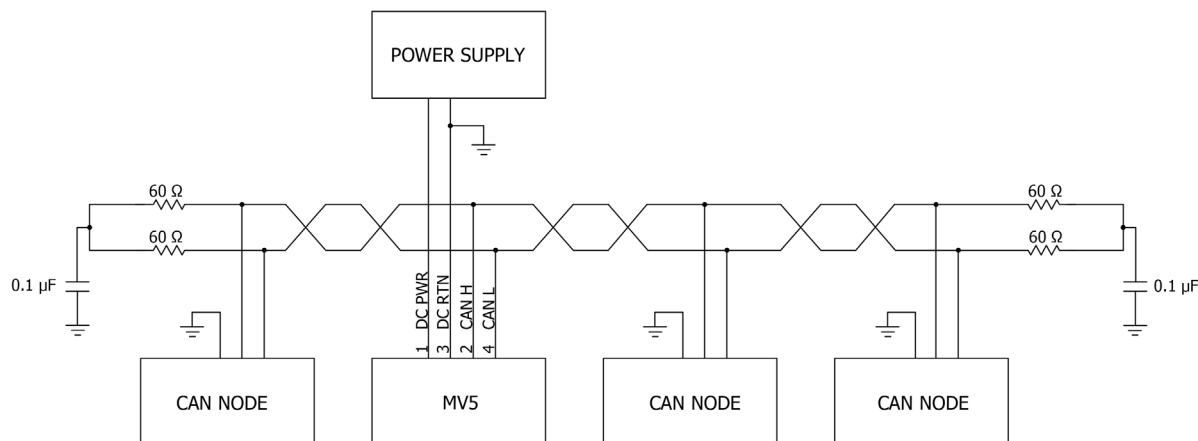


This device may also be purchased from LORD Sensing sales sensing_sales@LORD.com (P/N 6212- 3014). It includes a short CAN bus connector for the sensor, USB dongle and power, and a power supply with global plugs.

For full CAN command detail, refer to the J1939 or CANopen version of the M-Series user manual.

These are found on the LORD Sensing website www.microstrain.com/inertial/m-series.

LORD recommends split termination on both ends of the CAN bus cable for optimum EMC performance.



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