

3DM-GX3[®]

Extending the USB Cable

Overview

LORD MicroStrain[®] [3DM-GX3[®]](#) inertial sensors have USB, RS-232 and/or TTL communication interfaces. In particular, LORD MicroStrain[®] provides an 8 foot USB-to-Mini DB9 cable part number 6212-1040, drawing number [9022-0019](#) for USB operations. Certain applications may require that the inertial sensor be placed many feet/meters away from the host computer. This remote placement of the sensor can be easily accomplished by employing a USB 'booster' or 'extender'. This technical note assumes the user has some familiarity with the 3DM-GX3[®] inertial sensor and MIP[™] Monitor software.



Figure 1: 3DM-GX3[®]

USB Booster

To extend the USB, a base booster module, a remote booster module and a CAT5 cable up to 150 feet long are employed:

- connect the base booster module to the host computer,
- connect one end of the CAT5 cable to the base booster module,
- connect the other end of the CAT5 cable to the remote booster module,
- connect the USB end of the 6212-1040 to the remote booster module,
- connect the Mini DB9 end of the 6212-1040 to the 3DM-GX3[®] inertial sensor.



Figure 2: Base and Remote Booster Modules

From here there are no other special considerations. Power and communication is supplied to the inertial sensor as normal. Launch MIP[™] Monitor software and begin operations.



Figure 3: CAT 5 Cable

Support

LORD MicroStrain[®] support engineers are always available to expand on this subject and support you in any way we can.