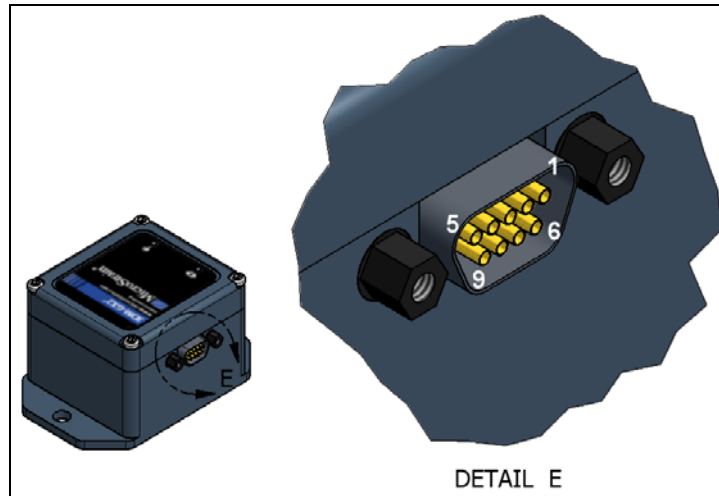


# Connector and Pinouts

## 3DM-GX2<sup>®</sup>, Inertia-Link<sup>®</sup>, 3DM-GX3<sup>®</sup> -25, -35 and -45

### Overview

The 3DM-GX2<sup>®</sup>, Inertia-Link<sup>®</sup>, 3DM-GX3<sup>®</sup> -25, -35 and -45 have a 9-pin female “Micro-D” connector mounted on their enclosure sidewall for power and communications. Mating connectors are available from Ulti-Mate Connector Inc. ([www.umi-c.com](http://www.umi-c.com)). Any “A” Series or “P” Series 9-pin male Micro-D connector will mate with the 3DM-GX2<sup>®</sup>, Inertia-Link<sup>®</sup>, 3DM-GX3<sup>®</sup> -25, -35 and -45. These connectors are available with various termination options to suit a wide range of requirements.



### Electrical Connections

Pin #	USB <sup>4</sup>	RS232 <sup>4</sup>	RS422 <sup>4</sup>	Wireless <sup>4</sup>
1	D-	-	-	-
2	D+	-	-	-
3	+5V <sup>1</sup>	+5V <sup>1</sup>	+5V <sup>1</sup>	-
4	-	RxD <sup>3</sup>	RxD+ <sup>3</sup>	Do not connect
5	-	TxD <sup>3</sup>	RxD- <sup>3</sup>	Do not connect
6	+6V/+9V/+12V <sup>1</sup>	+6V/+9V/+12V <sup>1</sup>	+6V/+9V/+12V <sup>1</sup>	+6V/+9V/+12V <sup>2</sup>
7	-	-	TxD+ <sup>3</sup>	-
8	GND	GND	GND	GND
9	-	-	TxD- <sup>3</sup>	-

## Notes

<sup>1</sup> Connect *either* pin 3 *or* pin 6 per table below. Use whichever pin is more convenient. Leave the unused one unconnected.

Device	Pin 3	Pin 6
3DM-GX3-45	+3.2V to +5.5V	+5.2V to +16V
3DM-GX3-35	+3.2V to +5.5V	+5.2V to +16V
3DM-GX3-25 (serial number 2290 and higher)	+3.2V to +5.5V	+5.2V to +16V
3DM-GX3-25 (serial number 2289 and lower)	+4.5V to +5.5V	+5.2V to +5.5V***
3DM-GX2	+4.5V to +5.5V	+5.2V to +16V
Inertia-Link	+4.5V to +5.5V	+5.2V to +16V

\*\*\*GX3-25 serial numbers 2289 and lower have a max voltage of +5.5V unless thermal precautions are taken; please consult factory.

<sup>2</sup> Wireless products require power on pin 6.

Pin 6 voltage allowable range is +5.2V to +16V.

<sup>3</sup> RxD is the node's receive pin, and should be connected to the host's transmit pin.

TxD is the node's transmit pin, and should be connected to the host's receive pin.

<sup>4</sup> Electrical Connections for several communication interface types are shown. Use the connection that is appropriate to the interface on your specific orientation sensor model.

## Standard Cables

MicroStrain offers the following standard cables for use in interfacing to 3DM-GX2<sup>®</sup>, Inertia-Link<sup>®</sup>, 3DM-GX3<sup>®</sup> -25, -35 and -45 products:

Part Number	Interface
6212-1040	USB Cable
6212-1000	RS-232 Cable
6212-1070	RS-422 Cable
6212-0000 or 6215-0000	Battery Pack (for wireless)

**Note:** MicroStrain's standard cables do not provide all wiring patterns as shown in the Electrical Connections table. Please check the mechanical drawing of each cable or with MicroStrain's support engineers for your specific application.

## Custom Cable Components

Part Number	Description	Available From
6224-0100	9 lead color coded Micro-D craft cable with male connector, plastic housing, copper retainers and screws	MicroStrain
PR09N05	Male connector, solder cup, plastic housing	Ulti-Mate
PR09P05-26E5-4.0	Male connector, 4" 26AWG leads, plastic housing	Ulti-Mate

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