



Application Note:

OEM sensor communication and supply connections

Introduction

This Application Notes describes the OEM connections required for interface.

Caution

While working with the supply connections you must be sure to correctly identify the pin orientation as improperly connecting a sensor to voltage could cause permanent damage.

Connection Information for OEM Sensors

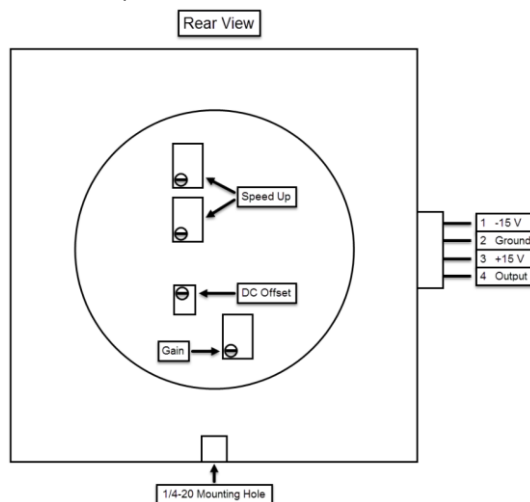
This section provides information about requirements to connect OEM sensors.

Passive Models: PM10-19B, PM150-19B, PM150-50B, PM150-50XB, PM1K-36B

- Connection to sensor: BNC with positive center conductor electrically floating above ground
- Output impedance: Close to 2.5 k Ω , needs to be run into a high impedance of at least 1 M Ω

Amplified Models: PM10-19A, PM150-19A, PM150-50A

- Connection to sensor: 4-pin (Molex part # 22-12-2044)
 - Pin 1: -15 V supply voltage
 - Pin 2: Ground
 - Pin 3: +15 V supply voltage
 - Pin 4: Output signal
- Supply voltage range: ± 10 V to ± 20 V
- Current draw: Approximately 8 mA at -15 V and 18 mA at +15 V
- Output impedance: 100 Ω
- Compatible connector: (not included) Molex 4-pin housing P/N 22-01-3047, wire crimp P/N 08-50-0114



PowerMax-RS Models: PM10-19C, PM150-19C, PM150-50C & PowerMax-Pro RS Models: PMP 150HD, HP

- PC Interface: RS232
- Connector: DE-9F
- Power input connector: 6 mm barrel with 2 mm pin, center positive
- Required Power: +5 VDC \pm 5% with less than 100 mV RMS noise
- Current draw: <300 mA
- Power Supply: Optional equipment; order P/N 1105557 for UL and PSE certified power supply with power cord.
- Alternate OEM power input:
 - Pin 1: +5 VDC
 - Pin 5: Ground (shared with Signal Ground)
- Communication:
 - Pin 2: Receive Data (into PC)
 - Pin 3: Transmit Data (out of PC)
 - Pin 5: Signal Ground
- Cable length: 300 mm. Use standard RS-232 cable to extend length and connect to PC or interface board.

Contact Coherent

For additional information, contact Coherent Technical Support as follows:

- Contact your local Coherent Service Representative (or visit www.Coherent.com to view a list of contacts worldwide)
- Send an e-mail to: LSMservice@Coherent.com
- Call the Coherent Technical Support Hotline
 - Within the USA: 1-(800)-343-4912
 - Outside of the USA: 1-(408)-764-4042

For additional information about **sensor products**, go to:

<https://www.coherent.com/measurement-control>

To download the **current software** for sensor products, go to this link and scroll down to the Software, Drivers & Manuals section:

<https://www.coherent.com/measurement-control/measurement/laser-measurement-and-control-help-center>