

Quickstart Guide

GDS-48 Wiring for SmartIR LEL / CO₂ Sensor



Wiring & Installation Instructions for GASMAX II

- 1) Install the GASMAX II gas monitor and GDS-48 as recommended (see GASMAX manual, sections 2.3 and 2.4).
- 2) To avoid excessive voltage at the sensor, prior to connecting the GDS-48 make sure the bridge excitation voltage does not exceed 4.5VDC (see GASMAX Manual, Section 6.2).
- 3) Connect the GASMAX to the GDS-48 as shown in Fig. 2. (R = Reference Bead (+), C = Common, A = Active Bead(-))
- 4) Re-adjust the sensor voltage at the GASMAX until the remote sensor voltage reads 4.5VDC AS MEASURED AT THE SENSOR.
- 5) Calibrate the unit using a 50% LEL mixture to verify proper operation.

Wiring & Installation Instructions for C1 Controller

- 1) Install the C1 *Protector* controller and GDS-48 as recommended (see C1 manual section 3.1.3).
- 2) To avoid excessive voltage at the sensor, prior to connecting the GDS-48 make sure the bridge excitation voltage does not exceed 4.5VDC. (see C1 Manual, Section 3.1.4).
- 3) Connect the C1 to the GDS-48 as shown in Fig. 3. (R = Reference Bead(+), C = Common, A = Active Bead(-))
- 4) Re-adjust the sensor voltage at the C1 until the remote sensor voltage reads 4.5VDC AS MEASURED AT THE SENSOR.
- 5) Calibrate the unit using a 50% LEL mixture to verify proper operation.

Wiring & Installation Instructions for C2 Controller

- 1) Install the C2 *Protector* controller and GDS-48 as recommended (see C2 manual section 3.1.3).
- 2) To avoid excessive voltage at the sensor, prior to connecting the GDS-48 make sure the bridge excitation voltage does not exceed 4.5VDC. (see C2 Manual, Section 3.1.4).
- 3) Connect the C2 to the remote sensor housing as shown in Fig. 4. (R = Reference Bead(+), C = Common, A = Active Bead(-))
- 4) Re-adjust the sensor voltage at the C2 until the remote sensor voltage is 4.5VDC AS MEASURED AT THE SENSOR.
- 5) Calibrate the unit using a 50% LEL mixture to verify proper operation.

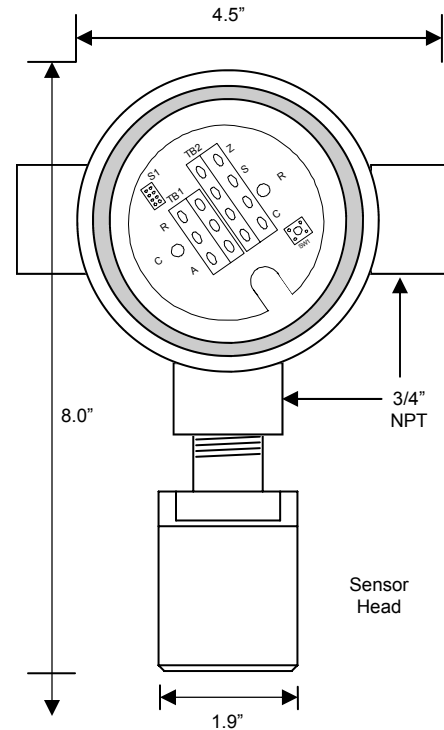


Fig 1.
GDS-48 Remote Sensor Assembly

Important:

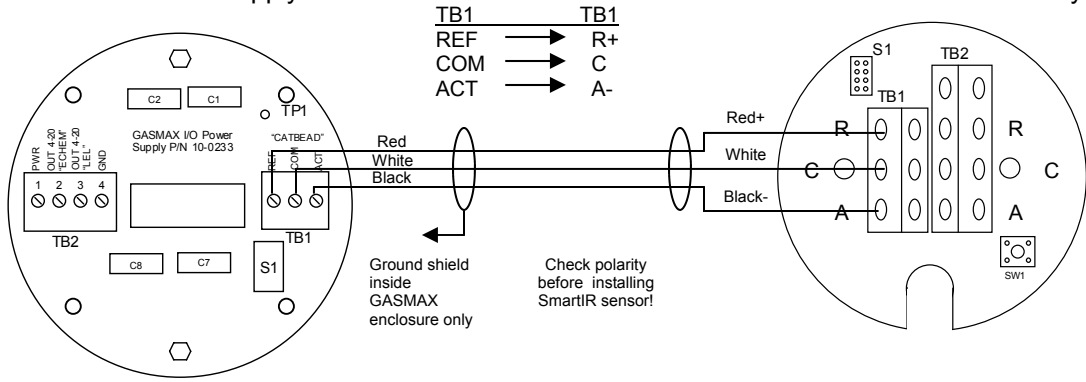
Observe Polarity!

Do NOT exceed 5.0V across TB1 terminals R(+) & A(-) with SmartIR sensor in place. Voltage in excess of 5.0V may destroy the sensor.

**Do NOT install with unused junction box inlet facing UP!
Water WILL leak into the junction box!**

GASMAX II Power Supply Board

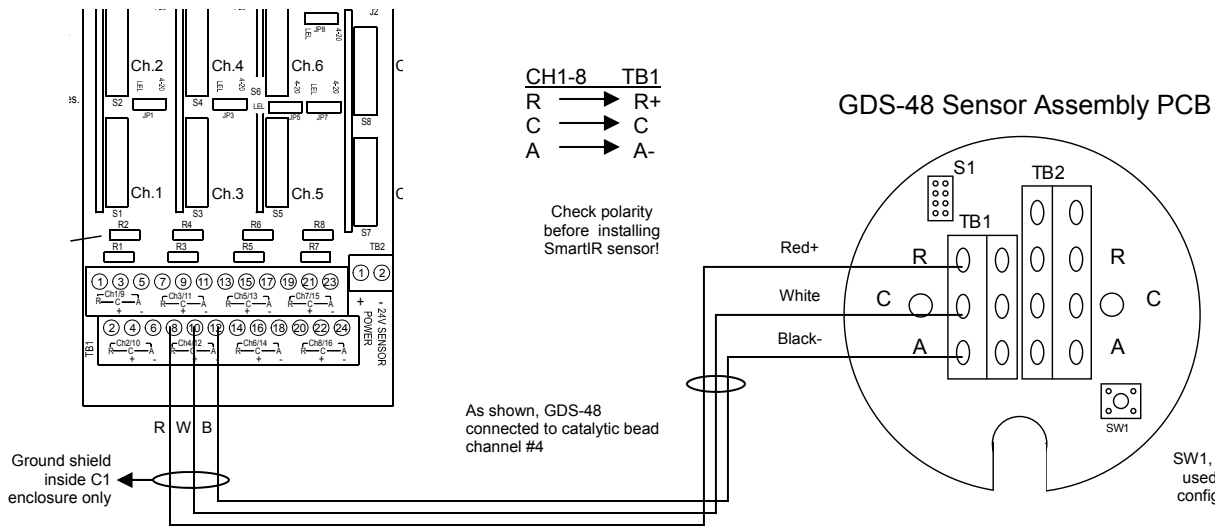
GDS-48 Sensor Assembly PCB



SW1, TB2 not used in this configuration

Fig 2. GASMAX II to GDS-48 Wiring Diagram for SmartIR

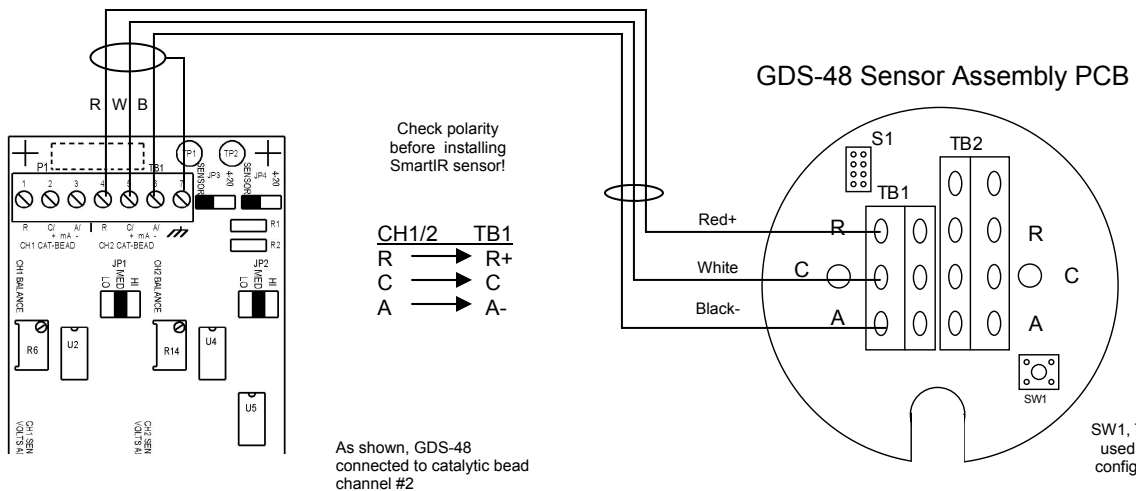
C1 8 Channel "CATBEAD" Sensor Option #10-0191 / 10-0192



SW1, TB2 not used in this configuration

Fig 3. C1 Controller to GDS-48 Wiring Diagram for SmartIR

C2 Catalytic Bead Sensor Input Board #10-0219*



SW1, TB2 not used in this configuration

Fig 4. C2 Controller to GDS-48 Wiring Diagram for SmartIR

*Note: Use same named terminals when wiring to C2 #10-0216 EC / Cat Bead board.