

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 by the GASMAX manual, sections 2.3 and 2.4.
- 2) Connect the GASMAX to the GDS-48 as shown in Fig. 2.
(R = Reference Bead (+), C = Common, A = Active Bead(-))
- 3) With no sensor installed, adjust the sensor voltage to **4.5VDC as measured between TB1 terminals R(+) and A(-) on the GDS-48 PCB** as described in the GASMAX manual, section 6.2.
- 4) **Turn off power.** Install the SmartIR LEL Sensor and re-adjust the voltage at the GASMAX until the remote sensor voltage reads between 4.5VDC.
- 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 by the C1 manual section 3.1.3.
- 2) Connect the C1 to the remote sensor housing as shown in Fig. 3.
(R = Reference Bead(+), C = Common, A = Active Bead(-))
- 3) With no sensor installed, adjust the sensor voltage to **4.5VDC as measured between TB1 terminals R(+) and A(-) on the GDS-48 PCB** as described in the C1 manual, section 3.1.4 *Initial Setup*.
- 4) **Turn off power.** Install the SmartIR LEL Sensor and re-adjust the voltage at the C1 until the remote sensor voltage reads between 4.5VDC.
- 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 by the C2 manual section 3.1.3.
- 2) Connect the C2 to the remote sensor housing as shown in Fig. 4.
(R = Reference Bead(+), C = Common, A = Active Bead(-))
- 3) With no sensor installed, adjust the sensor voltage to **4.5VDC as measured between TB1 terminals R(+) and A(-) on the GDS-48 PCB** as described in the C2 manual, section 3.1.4 *Initial Setup*.
- 4) **Turn off power.** Install the SmartIR LEL Sensor and re-adjust the voltage at the C2 until the remote sensor voltage reads between 3.0 - 5.0VDC.
- 5) Calibrate the unit using a 50% LEL mixture to verify proper operation.

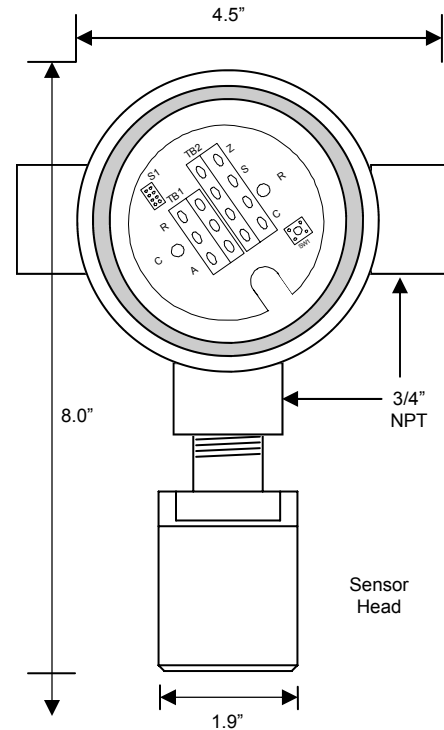


Fig 1.
GDS-48 Remote Sensor Assembly

Important:

Observe Polarity!

Do NOT exceed 5.5V across TB1 terminals R(+) & A(-) with SmartIR sensor in place. Voltage in excess of 5.5V 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

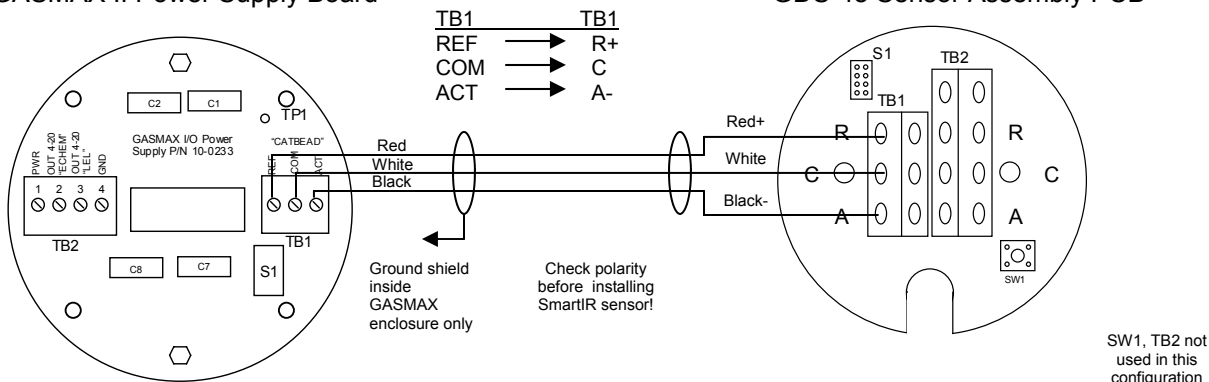


Fig 2. GASMAX II to GDS-48 Wiring Diagram for SmartIR

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

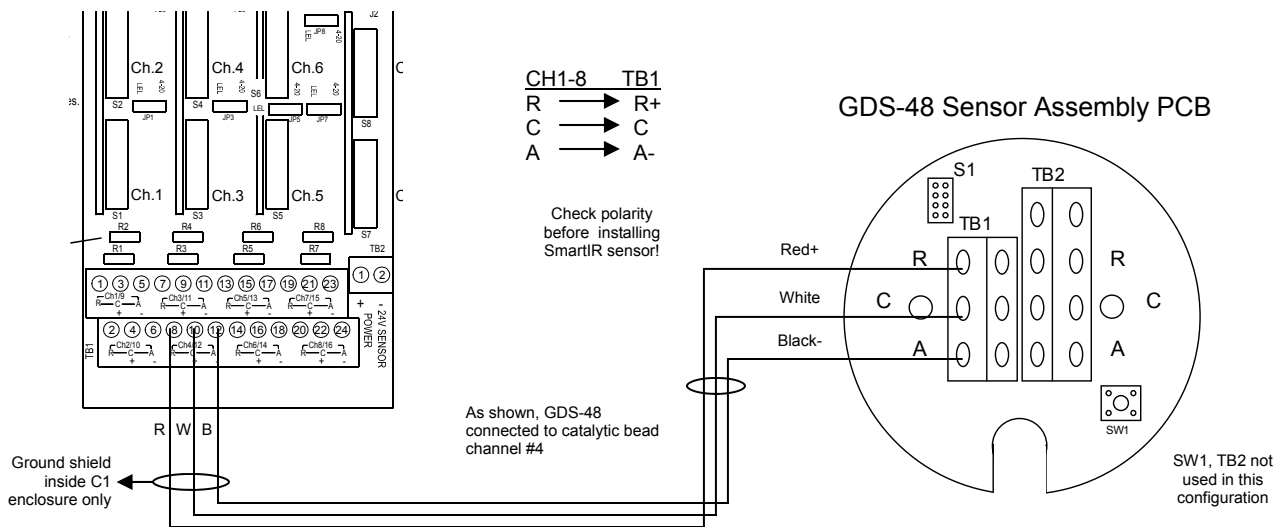


Fig 3. C1 Controller to GDS-48 Wiring Diagram for SmartIR

C2 Catalytic Bead Sensor Input Board #10-0219*

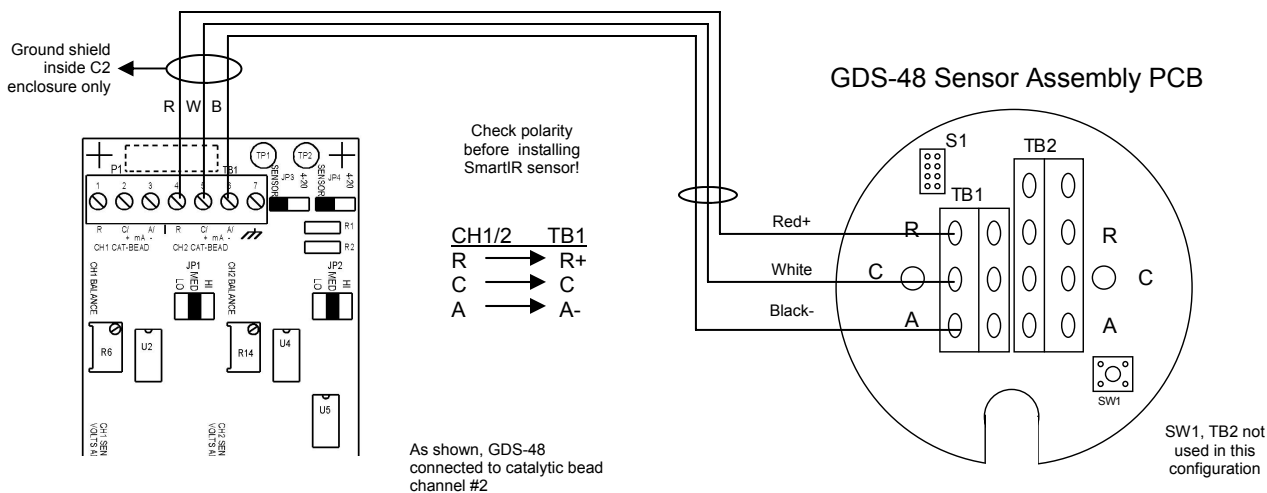


Fig 4. C2 Controller to GDS-48 Wiring Diagram for SmartIR

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