



*Manufacturers of Process  
Controls and Instrumentation*

# ***Instruction Manual***

Model: *OTC-22*

Function: *Loop Powered Optical Signal Isolator*

Input:  4-20 mA

Output:  4-20 mA

Serial #: \_\_\_\_\_

(If special or required)

For Technical Assistance And Questions Call  
USA: (231) 788-2900 CANADA: (905) 660-5336

## Restocking Policy

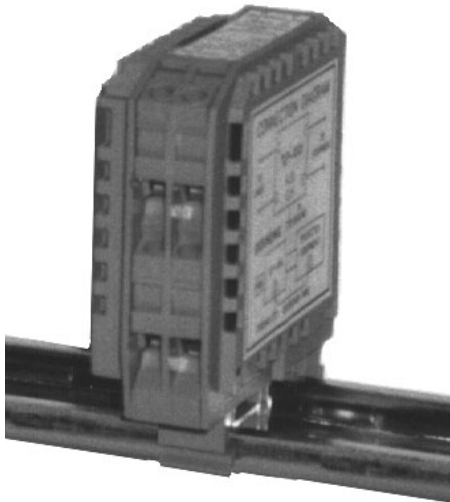
**All product returned to Pribusin Inc. in prime condition (not damaged, scratched or defaced in any way) within seven (7) months from the original date of shipment is subject to a 50% restocking charge. All product must be accompanied by a Return Authorization number (RA number) which must be obtained from Pribusin Inc. prior to returning any product.**

**After seven (7) months from the original date of shipment, products cannot be returned for restocking.**

**Custom designed products, modified products or all non-standard products may not be returned for restocking.**

## Warranty Policy

**Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original purchase. Pribusin Inc. will extend the same warranty protection on equipment, peripherals and accessories which is extended to Pribusin Inc. by the original manufacturer. Pribusin Inc. also assumes noliability, expressed or implied, beyond its obligation to prelace any component involved. Such warranty is in lieu of all other warranties, expressed or implied.**



### Standard features:

- Ideal for PLC-to-Transmitter Interfacing
- Connects to PLC like a Two-Wire Transmitter
- High Input-Output-Power Isolation (1500VAC Test)
- Small Size - Fits on Terminal Block Rail
- Fast Response Time (typ. 1 msec)
- Industry Standard 4-20mA Input and Output
- Loop-Powered - No External Power Required
- High Noise Rejection
- CSA and NRTL Approved (LR 51078)

### Function:

The OTC-22 provides high isolation from Input to Output in a small, easy to install package. The universal DIN rail mount often makes it possible to install the OTC-22 right next to the instrument that is to be isolated.

The OTC-22 is optically isolated to eliminate all electrical interference from input to output. Two-wire inputs and outputs require no external power to be applied to the OTC-22. The unit simply uses the existing power in the 4-20mA input & output loops. This makes it very easy to retrofit existing installations that show signal instability due to ground loops etc.

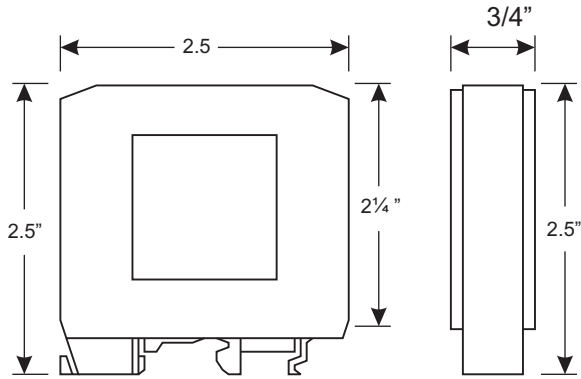
These properties make the OTC-22 ideal for front-end interfacing on PLC's that have two-wire inputs only. The OTC-22 essentially acts like a two-wire transmitter on the PLC side (OTC-22 output) and like a standard load on the transmitter side (OTC-22 input).

### Specifications:

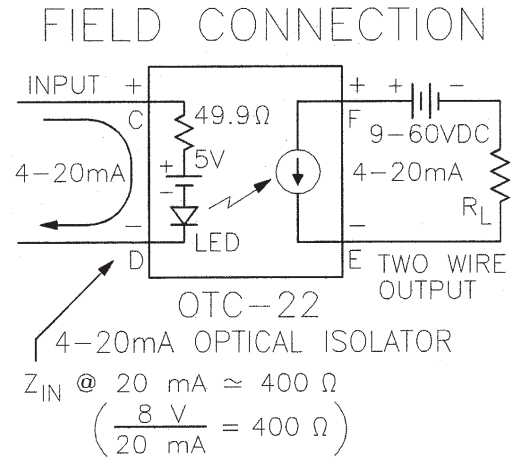
- Isolation: 1500 VAC Input to Output to Power (Test)
- Power: Loop-Powered  
(8.7V min. Required in 4-20mA loops)
- Accuracy/Linearity: +/-0.1% max., +/- 0.05% typ.
- Common Mode Rejection.: at 60 Hz = 120 dB
- Response Time: 1 msec to 99% of final value
- Temperature Effects: +/- 0.2% max., +/-0.1% typ.  
(for 50 Deg. C. change)
- Operating Temperature:-40 Deg. C. to + 50 Deg. C.

# OTC-22

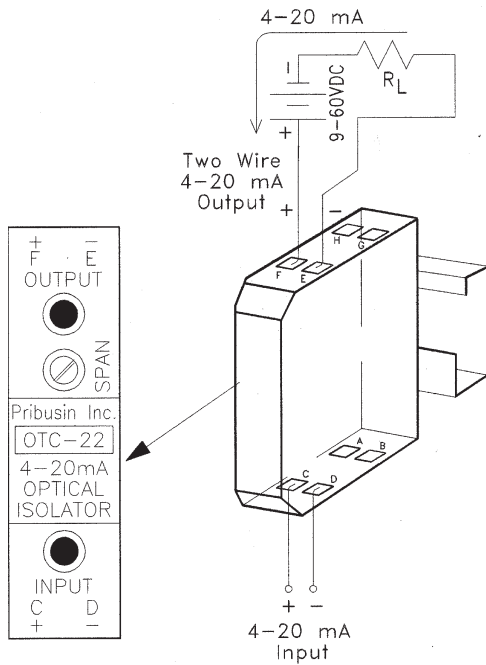
## Dimensions:



## Connection:



## Connection:



Manufactured By:

**Pribusin Inc.**

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[info@pribusin.com](mailto:info@pribusin.com)

### USA:

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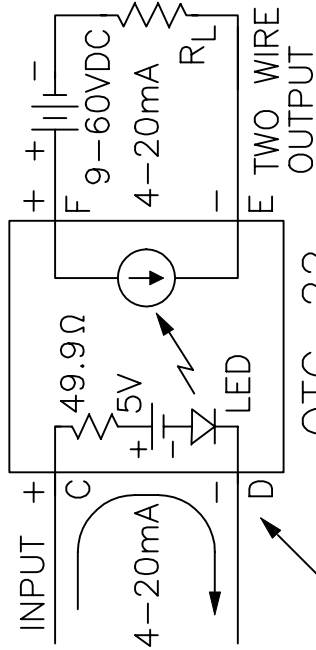
### CANADA:

Pribusin Inc.  
101 Freshway Dr. Unit 57  
Concord, Ontario, L4K 1R9  
Ph: (905) 660-5336  
Fx: (905) 660-4068

### Output Calibration:

1. Apply an input of 20 mA to terminals C and D.
2. Adjust SPAN potentiometer until output is 20 mA.

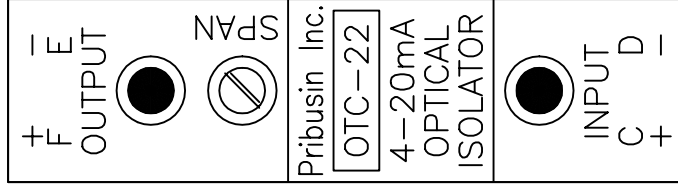
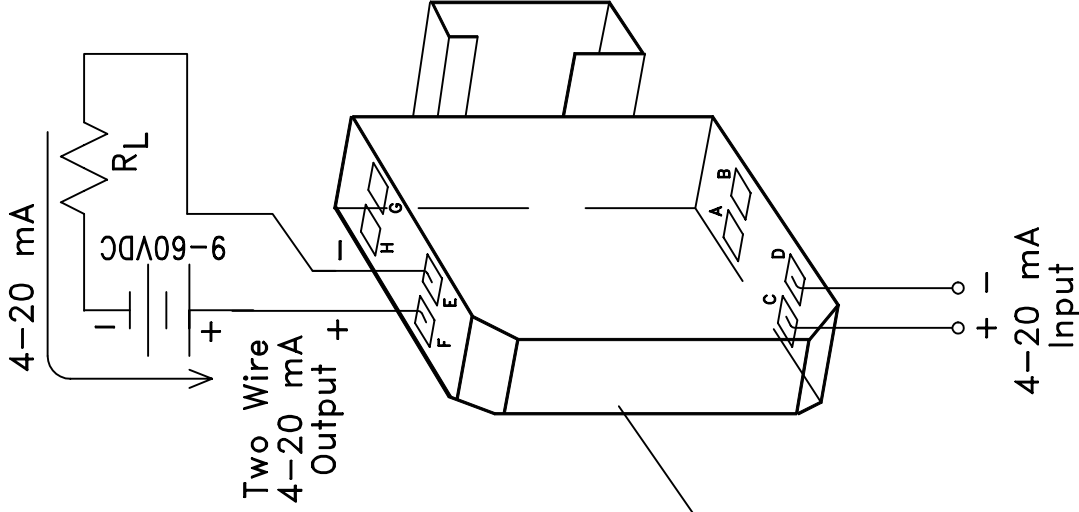
### FIELD CONNECTION



### 4-20mA OPTICAL ISOLATOR

$$Z_{IN} @ 20 \text{ mA} \approx 400 \Omega$$

$$\left( \frac{8 \text{ V}}{20 \text{ mA}} = 400 \Omega \right)$$



<b>Pribusin Inc. ©</b>	
CHKD :	DATE : May 05/97
Model: OTC-22 4-20mA Optical Isolator Connections/Calibration	
DWG. NO. :	105829
REV. A	

Note: For Details of Terminal Block Enclosure/  
Din Rail See Dwg. 104995-2.