## 4-20 mA Signal Repeater/Isolator Transmitters - DIN Rail Mounting

RONAN

## X54-3224 Four (4) Channel Input Loop Powered I to I Isolator (mA transmitter)

- High Density Four (4) Channel Packaging
- Input Loop Powered
- ♦ Low Input Loop Burden (<6 vdc @ 250 ohm load)
- Ideal for High Density I-to-I Isolator Requirements
- ♦ Max. Output Loop Load = 500 ohms
- ♦ Full Input/Output/Power and Channel Isolation
- ♦ Standard 35 mm DIN Rail Mounting

**DESCRIPTION:** The X54-3224 is a four channel current-tocurrent repeater/isolator transmitter powered by the input 4-20 mA current loops. Features include: two piece plug-in connectors for easy wiring and maintenance; full 1000 vac isolation; and front panel access to ZERO and SPAN Adjustments. Dual output options per channel allows for matching load requirements and Input loop burden. RFI protection, wide operating temperature, and high accuracy are standard features.



### **SPECIFICATIONS:**

#### **Inputs:**

4-20 mA (input loop burden is <6 vdc drop+(IloadXRload)) Outputs:

Output #1 = 4-20 mA into 0 to 99 ohm load (3 vdc)

Output #2 = 4-20 mA into 100 to 500 ohm load (10 vdc)

### **Span Adjustment:**

Front-accessible, multi-turn, infinite resolution potentiometer permits minimum +/- 5% adjustment.

### Zero Adjustment:

Front-accessible, multi-turn, infinite resolution potentiometer permits minimum +/- 5% adjustment

**Calibrated Accuracy:** +/- 0.1% of span

- Isolation: 1,000 vac between channels, input and output.
- **Common Mode Rejection:** > 120 dB, DC at 60 Hz.

### **Common Mode Voltage:**

1000 volts peak AC maximum without damage.

#### **Ambient Temperature Coefficient:**

Ambient temperature range: 32 to 158 F (0 to 70 C).

#### Gain: < +/- 0.01 %/ F.

Zero: < +/- 0.005 %/ F.

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#### **Ambient Temperature Range:**

Operating: -20 to 158 F (-25 to 70 C). Storage: -40 to 158 F (-40 to 70 C).

#### **Radio Frequency Effects:**

<0.4~mV (referred to input) + 0.2% of span (referred to output) when exposed to 5W transmitter with frequency range 20-460 MHz at a distance of meter.

#### **Terminals:**

High temperature polyester type, wire size 12 AWG max., 10 A max., 300 V max.

Specifications apply at 23 +/- 2 C (74 +/- 2 F) unless otherwise specified, and are subject to change without notice,

# X54-3224 Four (4) Channel Input Loop Powered I to I Isolator (continued)

## TERMINAL ARRANGEMENT:

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maintenance.

standards).

2.) Use up to 12 awg wiring.

J1-2

Load #1 J2-2



1.) Plug-in connector design simplifies installation and

3.) When inserted, case back cover provides a mechanical

cover for connector screws (as required by European



**MECHANICAL DETAIL:** 

#### **TYPICAL WIRING EXAMPLES:** 24 VDC Pwr PLC Powered Loop Loop Powered 2W Transmitter Loop Powered 2W Load #1 Transr nitter J2-1 4-20 mA Load #2 J2-1 J1-2 X54-3224 4-20 mA Load #2 X54-3224 J1-1 .12-2 Example #1 Example #2 -20 mA J1-1 .12-2 J1-1 12-1 4-20 mA 4-20 mA 4 Wire Transmitter with Powered Output Loop Load #2 X54-3224 **ORDERING INFORMATION:** X54 - 3224

## Accessories: D2-35X7.5 35mm X 7.5mm "U" style rail

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Example #3

24 VDC

Ronan Engineering Company Ph: 800-327-6626 Fax: 818-992-6435 E-mail: sales@ronan.com Web: www.ronan.com