

# 4-20 mA LOOP CURRENT RECEIVER

## **FEATURES:**

- Eliminates DC Power Supply
- Individual Electronic Protection for each channel
- Loop Current Indication LEDs
- **Testing & Calibration Connectors**
- Simple, straightforward wiring
- Low cost, easy mounting



## APPLICATION:

The ET420 board provides convenient way for interfacing 4-20 mA current loops with any generic DDC panel that accepts 5 VDC input signals.

The board simplifies wiring (two wires in - two wires out) and eliminates the need for a separate DC power supply required by all current 'sinking' devices.

The board is ideal to interface and protect any 4-20 mA field device such as RTD / RH transmitters, flow meters or any industrial current loop signals.

## SPECIFICATIONS:

Power: 24 VAC, 400 mA RMS maximum (@ all loops in short condition)

Input: 4-20 mA current loop (two or three wire)

1-5 VDC buffered signal (250R precision conversion resistors) Output:

Loop Excitation: 24VDC, electronically protected (Imax = 100 mA)

Indication: Current Loop Status - Amber LED

Power ON (green LED);

Dimensions: W=2.75" (70 mm); L=3" (75 mm); boards mounts in

TR-2 snap-track (provided).

## PRODUCT DESCRIPTION:

The ET420 four channel board converts four 4-20 mA signals to four independent 1-5 VDC outputs. The board provides individually protected 24 VDC power supply for each current loop. The output signals are buffered by unity gain op-amps.

Each channel is equipped with a large LED indicating the current loop status. The input excitation is electronically short circuit and reverse polarity protected thus any short condition in one loop will not affect the operation of other devices. Each loop has a jumper allowing for fast loop circuit disconnect and convenient loop current measurement with an in-line mA meter.

The board also accepts 4-20 mA current from two wire sourcing devices. In such case, the 24 VDC excitation is not used and the input signal is wired to different terminals.

The board is equipped with angular connectors for fast and easy wiring. It mounts in a molded snap-track 2.75 " (70 mm) wide, provided with each board.

## **ORDERING INFORMATION:**

ET420 - Fully describes this product