



# TX-230 Current Signal Isolator









### **O**VERVIEW

The ASHE TX series of Signal Conditioners, Isolators, Transducers and Transmitters comprise a wide range of high quality and reliable instruments for the conversion, amplification and isolation of analog and digital signals.

The instruments accept standard industrial process input signals such as DC/AC Voltage, DC/AC Current, 4 to 20 mA DC, RTD Pt-100 sensor, Thermocouple sensor, Frequency [Pulse], Resistance etc. and provide a buffered and isolated output with enhanced load driving capacity. The instruments find wide usage in single loop or distributed process measurement and control applications.

The new Series TX-230 DC Current signal Isolators measure a standard current loop signal of 4 to 20 mA DC and buffer the signal into an isolated current loop signal of 4 to 20 mA DC [or as required]. The Output signal is linear with respect to the Input signal and is galvanically and optically isolated to a potential level of 1.5 KV rms for one minute.

The instruments operate on 85 to 270 V Universal AC power supply, or alternatively 20 to 70 VDC power supply. Optional features include Signal repeating [multiple isolated outputs], higher load driving capability, digital indication facility, control relay outputs, two-wire operation with auxillary power output, etc.

The instruments are available in compact industrial grade enclosures in DIN Rail / Wall-mounting execution, or optionally in IP65 protected field mount weather-proof enclosures, or in CIMFR certified explosion-proof enclosures. Absence of any moving parts provides these instruments inherent advantages like immunity to mechanical shocks, dust, ambient temperature, humidity and corrosive atmosphere.

#### **SPECIFICATIONS**

Model ASHE TX-230.

**Type** DC Current signal Isolator.

**Principle** Optical Isolation and Signal Conditioning.

Input Signal 4 to 20 mA DC.

Output Signal 4 to 20 mA DC [or as required].

**Load Driving Capacity** 600 Ohms. **Linearity** + 0.1%.

**Isolation** Between Input // Output // Power Supply.

 Isolation type
 Optical and Galvanic.

 Isolation level
 1.5 kV rms for one minute.

 Output protection
 Short / Open Circuit protection.

 Calibration facility
 Zero and Span settings [external].

Accuracy  $\pm 0.1\%$ .

**Indication** Red LED for Power On.

**Power Supply** 85 to 270 V AC, 50/60 Hz Universal

AC power. [Optionally 20 to 70 VDC].

**Dimensions** 100 x 22 x 110 mm.

 $[\mathsf{H}\ \mathsf{x}\ \mathsf{W}\ \mathsf{x}\ \mathsf{D}].$ 

ExecutionDIN-Rail / Wall mounting.EnclosureIndustrial grade ABS.Enclosure colourIndustrial Grey

Weight Approximately 0.4 Kgs.

**Operating Temperature** 0 to 50°C.

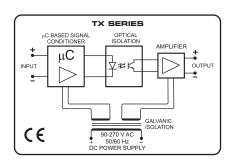
#### **FEATURES**

- Optical & Galvanic Isolation between Input, Output & Power Supply.
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs
- High load driving capacity of retransmitted signal
- Configurable output option of current / voltage
- Short-circuit / Open-circuit protection of outputs
- Front accessible Zero and Span calibration for all channels
- Digital Indication option with/without control relay outputs
- Auxillary power for two-wire transmitters
- AC or DC Power Supply options
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP65 execution
- Current limiting for I/O protection
- Customized outputs offered
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship



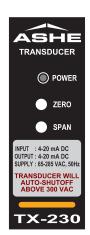
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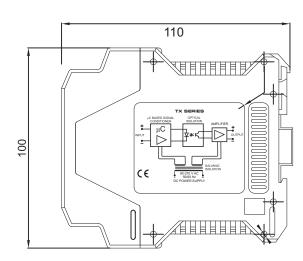
#### **BLOCK DIAGRAM**



Dimensions: 100 x 22 x 110 mm Execution : DIN Rail mount.

### **DIMENSIONAL DIAGRAM**





## How To Order

DC CURRENT SIGNAL ISOLATOR TX-230 Input: 4 to 20 mA DC. Output: 4 to 20 mA DC. **Configuration and Add-on options OPTICAL AND GALVANIC ISOLATION** Required Not Required N **POWER SUPPLY** 2 85 to 270 V AC, 50/60 Hz S 20 to 70 VDC D Other (to be specified) Ζ **EXECUTION** 3 DIN Rail mounting [100 x 22 x 110 mm] N Field mounting in Weather-proof execution W (Polycarbonate enclosure, IP65 protection) Field mounting in Flame/Explosion-proof execution Χ (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)

## **OUR OTHER PRODUCTS**













FLOW TOTALIZER SIGNAL ISOLATORS & TRANSDUCERS

TEMPERATURE SCANNER

STATIC POWER SWITCHES



#### **ASHE CONTROLS PRIVATE LIMITED**

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