



### OVERVIEW

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-210 Temperature Isolating Transducers measure the signal from an RTD Pt-100 [three-wire] temperature sensor and convert the signal into an isolated analog 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 90 to 270 V, 50/60 Hz 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, data communication etc.

The instruments are available in compact industrial grade enclosures in DIN Rail execution, or optionally in IP66 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.

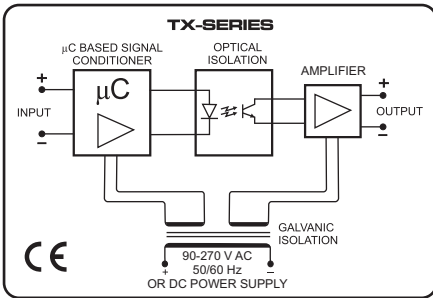
### SPECIFICATIONS

<b>Model</b>	ASHE TX-210.
<b>Type</b>	Temperature Isolating Transducer.
<b>Principle</b>	Optical Isolation and Signal Conditioning.
<b>Input Signal</b>	RTD Pt-100 [three-wire] sensor.
<b>Output Signal</b>	4 to 20 mA DC
<b>Load Driving Capacity</b>	600 Ohms.
<b>Linearity</b>	± 0.15%.
<b>Range</b>	To be specified.
<b>Isolation</b>	Between Input // Output // Power Supply.
<b>Isolation Type</b>	Optical and Galvanic.
<b>Isolation Level</b>	1.5 kV rms for one minute.
<b>Output Protection</b>	Short / Open Circuit protection.
<b>Calibration Facility</b>	Zero and Span settings [external].
<b>Accuracy</b>	± 0.1%.
<b>Indication</b>	Red LED for Power On.
<b>Power Supply</b>	90 to 270 V AC, 50/60 Hz, Universal Power Supply (Optionally 20 to 70 V DC).
<b>Dimensions</b>	100 x 22 x 110 mm. [H x W x D].
<b>Execution</b>	DIN-Rail mounting.
<b>Weight</b>	Approximately 0.3 Kgs.
<b>Operating Temperature</b>	0 to 55°C.

### FEATURES

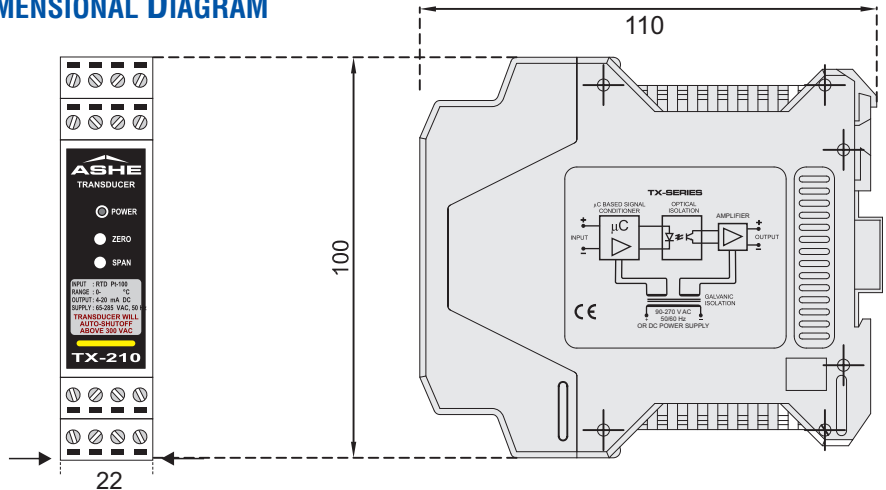
- Optical & Galvanic Isolation between Input, Output & Power Supply
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs
- High load driving capacity of retransmitted signal
- Configurable output option of current / voltage
- Short-circuit / Open-circuit protection of outputs
- Front accessible Zero and Span calibration for outputs
- Digital Indication option with/without control relay outputs
- AC or DC Power Supply options
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP66 execution
- Current limiting for I/O protection
- Customized outputs offered
- Proven record of several thousand installations

**BLOCK DIAGRAM**



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

**DIMENSIONAL DIAGRAM**



**How To ORDER**

TEMPERATURE TRANSDUCER	TX-210				
Configuration and add-on options					
<b>1 OPTICAL AND GALVANIC ISOLATION</b>					
▶ Isolation Required				Y	
▶ Isolation Not Required				N	
<b>2 POWER SUPPLY</b>					
▶ 90 to 270 V AC, 50/60 Hz					A
▶ 20 to 70 VDC					D
<b>3 OUTPUT SIGNAL</b>					
▶ 4 TO 20 mA DC					G
▶ 0 to 10 VDC					O
<b>4 EXECUTION</b>					
▶ DIN Rail mounting					D
▶ Field mounting in Weather-proof execution (Polycarbonate enclosure, Ingress protection)					W
▶ Field mounting in Flame/Ex-d execution (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)					X

**OUR OTHER PRODUCTS**



FLOW TOTALIZER



SIGNAL ISOLATORS & TRANSDUCERS



TEMPERATURE SCANNER



FLAMEPROOF INSTRUMENTS



STATIC POWER SWITCHES



Designed and Manufactured by :

**ASHE CONTROLS PRIVATE LIMITED**

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