



# TX-205 DC Voltage Isolating Transducer

#### **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-205 DC Voltage to Current Isolating Transducers measure DC Voltage from nominal mV levels to several hundred Volts 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 / Wall-mounting 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.



# RoHS Compliant CE CMAKE IN INDU

#### **SPECIFICATIONS**

Model ASHE TX-205.

Type DC Voltage Isolating Transducer.

Principle Optical Isolation and Signal Conditioning.

Input Signal 4 to 20 mA DC / 0 to 10 VDC

Other (to be pre-specified)

Output Signal 4 to 20 mA DC (or as required).

Load Driving Capacity 600 Ohms.

Linearity  $\pm$  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 Girsuit protection)

Output ProtectionShort / Open Circuit protection.Calibration FacilityZero and Span settings (external).

Accuracy  $\pm 0.1\%$ .

**Indication** Red LED for Power On.

**Power Supply** 90 to 270 V AC, 50/60 Hz, Universal AC power

Supply (Optionally 20 to 70 V DC).

**Dimensions**  $100 \times 22 \times 110 \text{ mm}.$ 

 $[H \times W \times D].$ 

ExecutionDIN-Rail / Wall mounting.EnclosureIndustrial grade ABS.WeightApproximately 0.4 Kgs.

**Operating Temperature** 0 to  $55^{\circ}$ C.

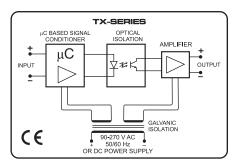
#### **FEATURES**

- 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
- AC or DC Power Supply options (pre-specified)
- 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

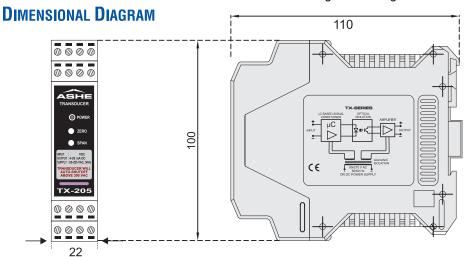


TX-205 DC Voltage Isolating Transducer

### **BLOCK DIAGRAM**



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



# **How To Order**

DC VOLTAGE TRANSDUCER TX-	205				
Configuration and add-on options					
INPUT SIGNAL					
4 to 20 mA DC		L			
0 to 10 VDC		V			
Other (to be specified)		Υ			
POWER SUPPLY					
90 to 270 V AC, 50/60 Hz			Α		
20 to 70 VDC			D		
OUTPUT SIGNAL					
4 to 20 mA DC				G	
0 to 10 VDC				0	
Other (to be specified)				Υ	
EXECUTION					
DIN Rail mounting					D
Field mounting in Weather-proof execution					W
(Polycarbonate enclosure, Ingress protection)					
Field mounting in Flame/Ex-d execution					Χ
(Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)					

## **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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