



## OVERVIEW

The Frequency to Current Transducer unit is a compact and reliable instrument used in process control applications where it is desired to convert a Frequency signal to a DC Current signal for purposes such as indication, feedback, control or recording. The instrument buffers the input Frequency signal and provides an optically isolated current output with an enhanced load driving capacity.

Functionally, the ASHE TX-225 Frequency to Current Transducer is essentially a Signal Transducer, providing buffering and filtering of the input Frequency signal from transients, then converting the pulses into a variable analog output signal which is isolated from the input. The Output signal is linear with respect to the Input signal and is Optically Isolated to a potential level of 3 KV. The TX Series Transducers are optionally available with RS485 Modbus RTU communication, enabling seamless transmission of the input process signal in digital format.

The instrument accepts Line Frequency signal between 45 to 55 Hz and provides an output signal of 4 to 20 mA DC current or 0 to 10 VDC signal capable of driving an independent load of upto 600 Ohms. The instrument operates on universal AC or DC power supply.

The instrument is available in standard and rugged DIN Rail / Rear-panel mounting execution. Absence of any moving parts provides these instruments inherent advantages like immunity to Mechanical Shocks, Dust, Ambient Temperature, Humidity and mildly Corrosive ambiances.

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.



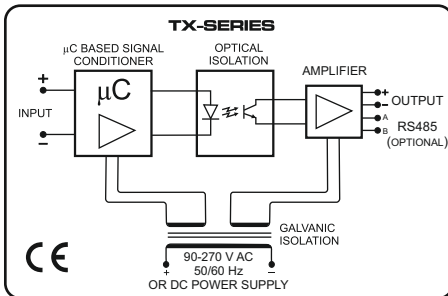
## SPECIFICATIONS

<b>Model</b>	ASHE TX-225.
<b>Type</b>	Frequency to Current Transducer.
<b>Principle</b>	Optical Isolation and Signal Conditioning.
<b>Input Signal</b>	45 to 55 Hz. (Line Frequency).
<b>Output Signal</b>	4 to 20 mA DC or 0 to 10 V DC.
<b>Load Driving Capacity</b>	600 Ohms.
<b>Linearity</b>	± 0.1%.
<b>Isolation</b>	Between Input // Output // Power Supply.
<b>Isolation Type</b>	Optical and Galvanic.
<b>Isolation Level</b>	3 kV RMS for one minute.
<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 VAC, 50/60Hz Universal AC/DC Power Supply (Optionally 20 to 70 VDC).
<b>Dimensions</b>	100 x 22 x 110 mm. [H x W x D].
<b>Execution</b>	DIN-Rail / Wall mounting.
<b>Enclosure</b>	Industrial grade ABS.
<b>Weight</b>	Approximately 0.6 Kgs.
<b>Operating Temperature</b>	0 to 55°C.

## FEATURES

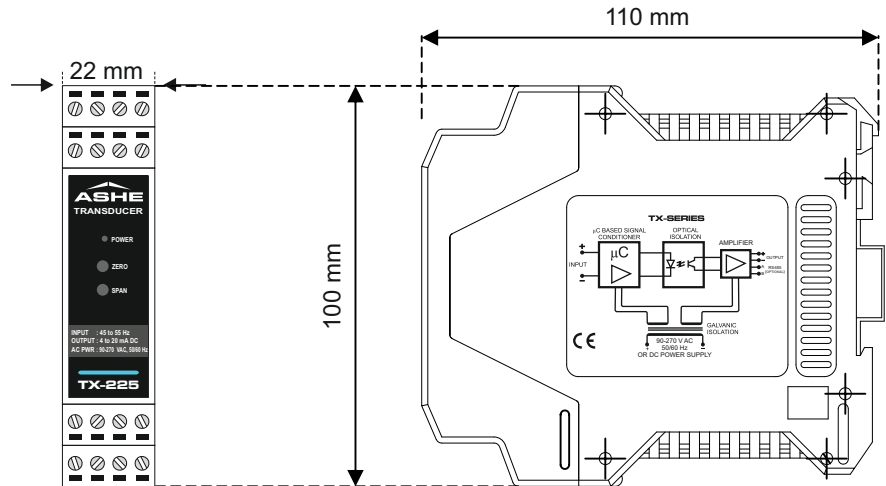
- Optical & Galvanic Isolation between Input, Output & Power Supply
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs (offered in other enclosure)
- High load driving capacity of retransmitted signal
- RS485 on Modbus RTU output option (to be pre-specified)
- Output Signal 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
- Two-year Performance Warranty
- Proven record of successful site installations

**BLOCK DIAGRAM**



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

**DIMENSIONAL DIAGRAM**



**FRONT VIEW**

**SIDE VIEW**

**HOW TO ORDER**

LINE FREQUENCY TRANSDUCER	TX-225			
<b>Configuration and add-on options</b>				
<b>1 POWER SUPPLY</b>				
▶ AC Voltage 90 to 270 VAC, 50/60 Hz			A	
▶ DC Voltage 20 to 70 VDC			D	
<b>2 INPUT SIGNAL</b>				
▶ 45 to 55 Hz (110 VAC)			F1	
▶ 45 to 55 Hz (230 VAC)			F2	
<b>3 OUTPUT SIGNAL</b>				
▶ DC Current				L
▶ DC Voltage				V

**OUR OTHER PRODUCTS**



FLOW TOTALIZER



SIGNAL ISOLATORS & TRANSDUCERS



TEMPERATURE SCANNER



FLAMEPROOF INSTRUMENTS



STATIC POWER SWITCHES