
# TRANSDUCERS & ISOLATORS

A precise sensing solution for automation/SCADA systems.

## FAST RESPONSE TO ENSURE ACCURATE MEASUREMENTS AND CONTROL.

- Measure, record and visualize electrical network parameters
- Easy to install, **Field configurable** by the user (TR4200/5200)
- Measured parameters can be programmed to generate equivalent output signals
- True RMS measurements provides accurate and reliable readings

## VERSATILE PRODUCT WITH ON-SITE PROGRAMMABILITY VIA KEYPAD.

- **Isolation between input to output** or output to output, ensures safety while connecting multiple systems
- Input and output current parameters are **field configurable**
- User Friendly interface to support remote monitoring and communication
- Output signal is transferable over a long range

## COMPLETE ISOLATION OF SIGNAL NOISE TO ENSURE MAXIMUM DATA RELIABILITY.

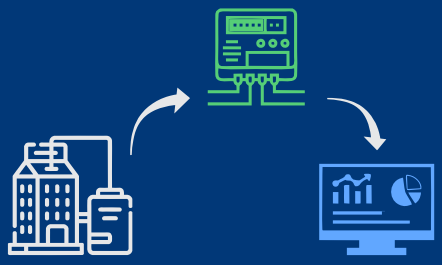
- Reliable and field proven safety mechanism isolates input and output during high voltage or current to ensure equipment is safe
- Electrical parameters are displayed via bright LEDs
- **Programmable Min, Mid and Max** at site

IN OUT
Galvanic isolation

TRUE RMS
Measurements

Fast
Response time

# MULTI-FUNCTIONAL TRANSDUCERS FOR PRECISE MONITORING AND CONTROL.



## Transducers & Isolators

DIN-Rail Mounted

- True RMS measurement
- Single and Dual output depending on models
- Quick response time of 300 msec
- Load resistence for current output is upto 500 ohms
- Isolation between Input and Output (ISO series)

## TR 4200 & TR 5200

- Input signal is isolated from output signal by 2KV
- Monitor and displays A, V, Hz, W, VA, PF & VAr based on Models
- Din Rail Mounting
- Quick response time of 300ms in display and communication
- Sets to protection mode during high voltage/current
- Configurable single phase/ three phase input and output
- Individual phase overload monitoring
- Patented customised display
- Compact device with dual output and Rs485
- Override selection for desired value and range.
- On field configurable Input and Output parameters

| APPLICABLE STANDARDS | |
|---|---|
| DIN 40050, EN 60529 | Degrees of protection provided by enclosure for electrical equipment against ingress of solid foreign objects. |
| DIN / IEC 60688:2012 | Electrical measuring transducers for converting AC and DC electrical quantities to analogue or digital signals. |

## Technical Specification

| Specification | TR XXXX | ISO XXX |
|---|---|---|
| **GENERAL CHARACTERISTICS** | | |
| Input Range: | 50V - 550V, 10mA - 5A | 0-20mA or 0.75mV or 0-10V (48V upto 800V) |
| Output: | 4-20mA or 0-20mA or 0-10V | |
| Power Supply: | 60 to 300V AC/DC, 15 to 60V DC (Optional) | |
| Display (4DIN Series)* | 6 digit, 10mm height | |
| Accuracy: | Class 0.5, Class 0.2 optional | |
| Response Time: | 300mS | |
| Frequency Bandwidth: | 45 - 65 Hzdc | |
| Offset Voltage: | 10mV | |
| Thermal Drift: | 300 ppm/°C | |
| Power Consumption: | 250mW (+12V) | |
| Isolation Voltage: | 2500 Vdc | |
| Overload Capacity: | 1.2 times full scale | |
| Flame Retardancy: | UL94-V0 | |
| Hysteresis Error: | 10mV | |
| **COMMUNICATION** | | |
| Rs485 Interface* | Parity: Odd, Even, None (Preferred Even)<br>Brand rate: 4800 bps to 19200 bps (Preferred 9600 bps)<br>Isolation: 2000 volts AC isolation for 1 minute between communication and other circuits.<br>Nodes: Upto 64 | |
| **ENVIRONMENTAL CHARACTERISTICS** | | |
| Output Ripple: | 10mV | |
| Operation Temperature: | -10 to +60°C | |
| Storage Temperature: | -55 to +65°C | |
| Installation: | 4DIN | |

*Only for 4200 / 5200

## Model Selection

| Parameters | TR 1110 | TR 1200 | TR 2100 | TR 2200 | TR 4200 | TR 5200 | ISO 100 | ISO 200 |
|---|---|---|---|---|---|---|---|---|
| **INSTANTANEOUS** | | | | | | | | |
| Single Phase V | ✓ | ✓ | | | ✓ | ✓ | | |
| Single Phase A | ✓ | ✓ | | | ✓ | ✓ | | |
| Single Phase Hz | ✓ | ✓ | | | ✓ | ✓ | | |
| Three Phase A/V/Hz | | ✓ | | | ✓ | ✓ | | |
| Three Phase Watts/VA/VAr/PF | | | ✓ | ✓ | ✓ | ✓ | | |
| Energy | | | | | | ✓ | | |
| ADC/VDC | | | | | | | ✓ | ✓ |
| Over ride | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Display | | | | | ✓ | ✓ | | |
| RS485 | | | | | ★ | ✓ | | ★ |
| Analog Output in Numbers | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 |

***Note:*** -10 to +10mA option available for single AO ★ Optional

## Mechanical Specification