



SIGNAL ISOLATOR

MI-431

APPLICATIONS

Field Interface device

Impedance matching of
Transmitters and Receiver

Isolation of field signals

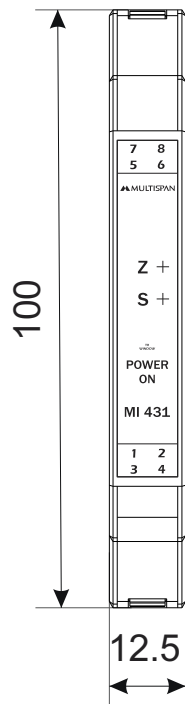
Distribution of signals

Factory automation

Powering of field Transmitters

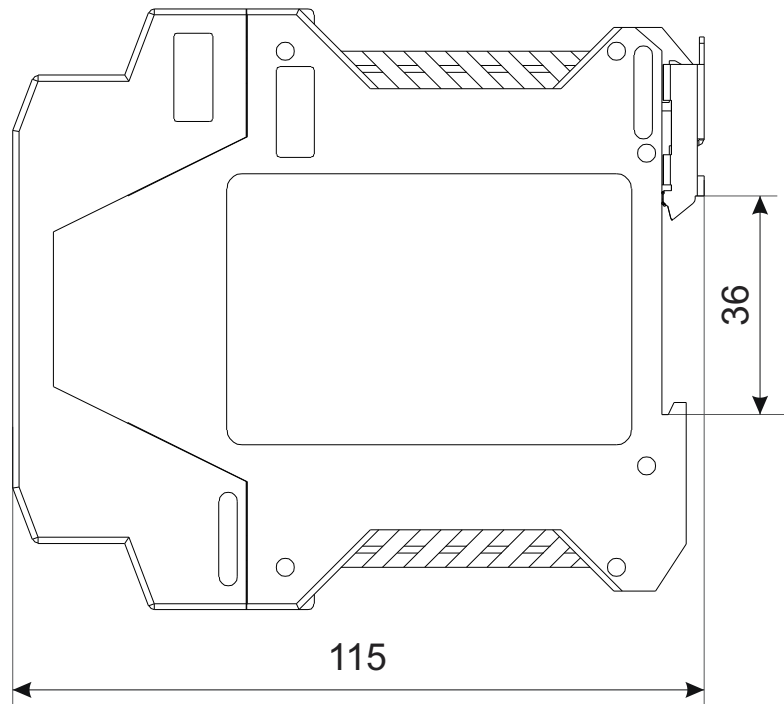
Mechanical Dimensions

Body Dimensions



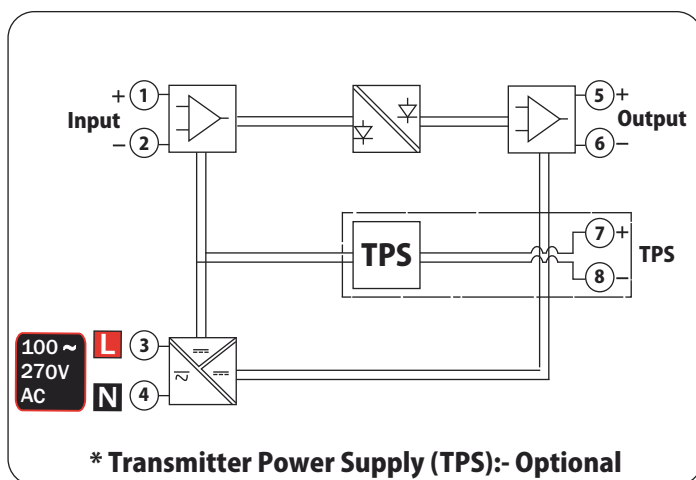
FRONT VIEW

All dimensions are in mm



RIGHT SIDE VIEW

Connection Diagram



TECHNICAL DATA

Input (Any one factory set)	0 -20mA DC / 4 to 20mA DC / 0 to 10V DC
Output (Any one factory set)	Single Output : 0 -20mA DC/ 4 to 20mA DC/ 0 to 10V DC, 24V DC Transmitter Supply (Optional)
Power Supply	100 to 270V AC/DC, 50/60Hz SMPS / 3VA 24V DC (Factory set any one)

Features

- High CMRR
- Zero & Span correction facility
- Three way isolation
- World wide safety approved 2KV AC for 1min between power supply, input & output.

Input

Input Type	Voltage / Current (Factory Set)
Voltage	0 to 100mv DC, -5V to 5V DC 0 to 10V DC, 0 to 500V DC (Factory Set)
Current	4 to 20mA DC, 0 to 20mA DC (Factory Set)
Input Impedance	
Current Input	≤100Ω
Voltage Input	≥100KΩ
CMRR	>120 db (Typical)
Temperature Co-efficient	<100 PPM

Output

Output type	Voltage / Current(Factory Set)
Voltage	0 TO 10 V DC
Current	0 TO 20 mA / 4 To 20 mA DC
Response Time	<50 ms
Accuracy	± 0.2% of FSD
Transmitter Power Supply	24V DC (30mA capacity)
Output Impedance	
Voltage Output	400 Ω
Current Output	500 Ω

Power Supply

Auxiliary Voltage	100 - 270V AC/DC
Power Consumption	less than 6VA

Power Dissipation

Power ON status LED	RED
Isolation type	Optical - 3 way

Isolation

Isolation between supply and Input	At least 2KV AC for 1 min.
Isolation between supply and Output	At least 2KV AC for 1 min.
Isolation between Input and Output	At least 2KV AC for 1 min.

Environmental

Ambient Temperature	0 to 55 °C
Relative Humidity	95% RH Non-Condensing
Protection	Conformal Coating on PCB

Mechanical Characteristics

Mounting Type	DIN Rail Mount
Dimension (HxWxD) mm	100 x 12.5 x 115
Material	Body Polyamide (PA) - FR
Terminal Screw Size	M3
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	28-12
Weight (Approx) gms	Unpacked : 95 Packed : 115