

Isolated Analog Signal Converter 10V - 10V

Features:

Isolated Analog Signal Converter 10V - 10V

Features:



Key Features

- **2-Way Galvanic Isolation:** Up to 1 kV RMS isolation barrier between input and output/power circuits
- **True Analog Signal Isolation:** Preserves original 0–10V analog waveform fidelity with a pure linear amplifier stage
- **No PWM or Digital Reconstruction:** Pure continuous analog processing without sampling ripple, ADC quantization, or conversion artifacts
- **Fast Dynamic Response:** Minimal signal processing latency (< 50 ms) for real-time PLC/SCADA analog control loops
- **High Noise Immunity:** Exceptional rejection of electrical noise, common-mode interference, and ground potential loops
- **Excellent Signal Fidelity:** High linear accuracy (< $\pm 0.5\%$ F.S.) across the full 0–10V DC input span
- **Compact Industrial Enclosure:** 35 mm DIN rail and wall-mount compatible housing (110 mm × 74 mm × 22 mm)
- **1-Year Warranty:** Full 1-year warranty against manufacturing defects
- **Factory Customizable:** Custom input and output voltage configurations available on request

Ordering Information

Product Code	Description
AC-10V-10V	Isolated Analog Signal Converter 10V - 10V
AC-420-420	Signal Isolator 4 20ma
USS10V24V-D	Voltage Source Simulator 0-10V
USS20M24V-D	Current Source Simulator 0/4 to 20mA
SPD-24V-DC	Surge Protection Device 24V DC SPD

Applications

- **Industrial Automation & Process Control:** Reliable signal interfacing and device connectivity across automated production lines.
- **SCADA & PLC Integration:** Seamless communication between field instrumentation and control systems.
- **Control Panel Building:** Compact 35 mm DIN rail mounting for clean and space-efficient cabinet wiring.
- **OEM Equipment & Diagnostics:** Robust electrical protection and standard industrial ratings.

Specifications

Parameter	Value
Mounting Type	35 mm DIN Rail Mounting
Dimensions	110 mm x 74 mm x 22 mm (L x W x H)
Enclosure Material	Industrial ABS plastic
Operating Temperature	−10 °C to +60 °C
Storage Temperature	−40 °C to +85 °C
Relative Humidity	5% to 95% RH (non-condensing)

Electrical Specifications

Parameter	Specification
Power Supply	24V DC (15 ~ 28V DC)
Operating Current	100mA @ 24V DC
Conversion Accuracy	< ±0.2% of Full Scale @ 25 °C
Temperature Drift	< 100 ppm / °C
Galvanic Isolation	1,000 V RMS (Input / Output)

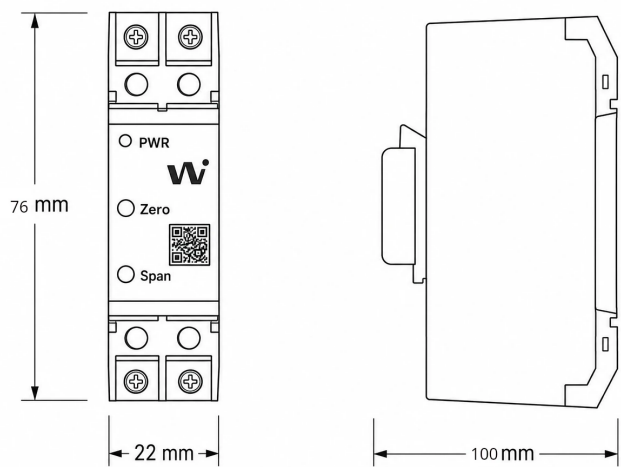
Input/Output Specifications

Parameter	Value
Input Signal Range	0–10 V DC
Output Signal Range	0–10 V DC (Load >= 2 kΩ)
Response Time	< 1 ms
Indication	Power LED ON
Adjustment	Zero & Span adjustment on front

Isolation & Protection Specifications

Parameter	Value	Standard / Notes
Galvanic Isolation	4,250 V RMS	Between Input & Outputs
Galvanic Isolation	1,500 V RMS	Between Input & Aux. Supply
Galvanic Isolation	No isolation	Between Outputs & Aux. Supply
Reverse Polarity Protection	Integrated	Protects internal circuitry against reverse DC wiring
Transient Clamping	600W TVS	Surge and spike suppression across all ports

Mechanical Dimensions



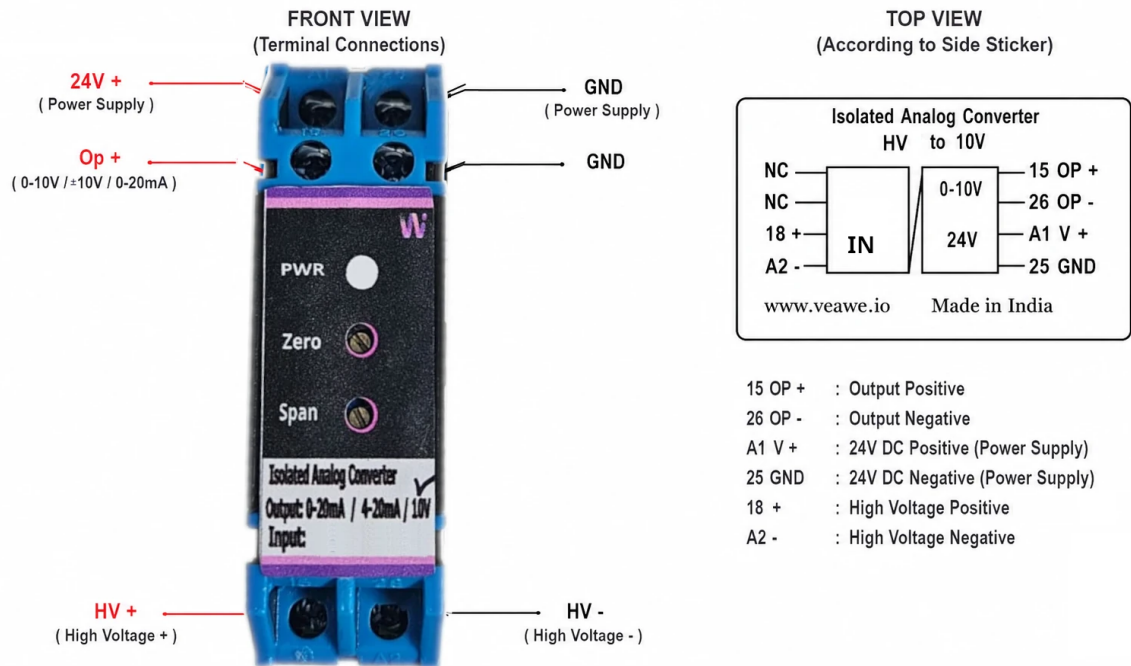
Terminal Details & Wiring

Pluggable industrial screw terminal block connections:

- **Input Terminals:** 0–10V DC analog input signal
- **Output Terminals:** 0–10V DC isolated analog output signal
- **Power Terminals:** 24V DC auxiliary power supply and ground

Wiring Diagrams

Note: All images and connection diagrams shown are for illustrative purposes only and may differ from the actual product.



Revision History

Revision	Date	Description of Change
Rev 1.0	2026-09-09	Initial datasheet release for AC-10V-10V

Get the latest version of this datasheet : [click here..](#)

Support

Website: www.veawe.io

Email: info@veawe.io