

Isolated Analog Signal Converter 300V to 10V

Features:

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Key Features

- **High Voltage DC Input:** Directly interfaces 0–300V DC voltage levels to standard 0–10V DC instrumentation
- **2-Way Galvanic Isolation:** Up to 1 kV RMS optical and magnetic isolation protects downstream PLCs and controllers
- **True Analog Signal Isolation:** Preserves original signal waveform fidelity using 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 DC voltage and bus monitoring
- **High Noise Immunity:** Exceptional rejection of electrical noise, inverter switching transients, and ground loops
- **High Conversion Accuracy:** Precision linear calibration delivering < $\pm 0.5\%$ F.S. accuracy @ 25 °C
- **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 spans available on request

Ordering Information

Product Code	Description
AC-300V-10V	Isolated Analog Signal Converter 300V to 10V
AC-150V-10V	Isolated Analog Signal Converter 150V to 10V
AC-70V-10V	Isolated Analog Signal Converter 70V to 10V
SPD-24V-DC	Surge Protection Device 24V DC SPD
USS10V24V-D	Voltage Source Simulator 0-10V

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)
Conversion Accuracy	< ±0.5% of Full Scale @ 25 °C
Temperature Drift	< 100 ppm / °C
Galvanic Isolation	1,000 V RMS (Input / Output)

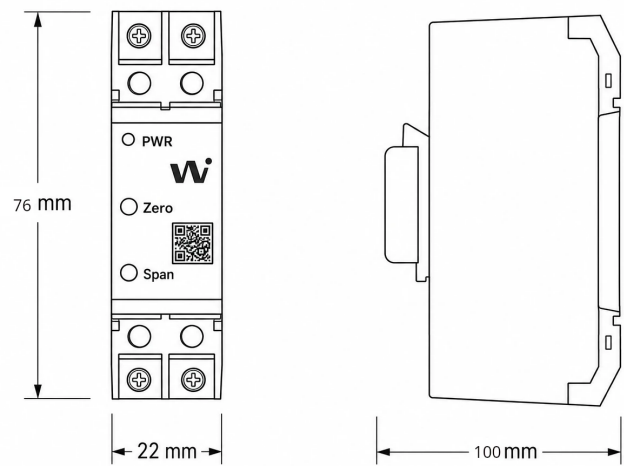
Input/Output Specifications

Parameter	Value
Input Signal Range	0–300 V DC (High Voltage DC)
Output Signal Range	0–10 V DC (Load ≥ 2 kΩ)
Response Time	< 1 ms

Isolation & Protection Specifications

Parameter	Value	Standard / Notes
Galvanic Isolation	1,000 V RMS	Optical and magnetic isolation barrier
Reverse Polarity Protection	Integrated	Protects internal circuitry against reverse DC wiring
Transient Clamping	600W TVS	Surge and spike suppression across all ports

Mechanical Dimensions



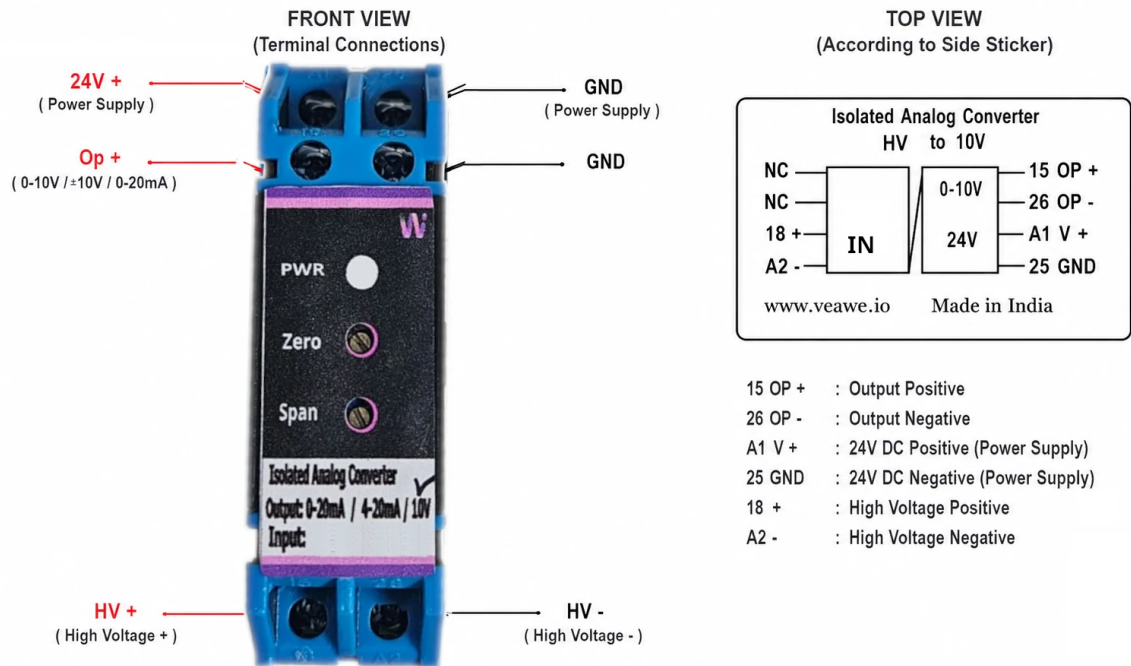
Terminal Details & Wiring

Pluggable industrial screw terminal block connections:

- **Terminal 18 (+) / Terminal A2 (-):** 0–300V DC high-voltage analog input signal
- **Terminal 15 (OP+) / Terminal 26 (OP-):** 0–10V DC isolated analog output signal
- **Terminal A1 (V+) / Terminal 25 (GND):** 24V DC auxiliary power supply

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-300V-10V

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

Support

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