

1 channel Voltage to Current Transducer

OVERVIEW

The IsoCap V2I module has been designed to provide low-cost and high-quality translation of voltage measurements into current loop signals.

The IsoCap V2I is a compact two-wire transmitter that converts a process level DC voltage input to a proportional 4-20mA control signal. Power is received a local DC supply when using a two wire connection.

ELECTRICAL

Accuracy (percentage of reading)	± 0.2%
Max total phase shift at 50Hz	< 0.05°
Max Input delay	< 2.8 μs
Integrated sensor noise (Referenced to input)	< 50 μA
Total power consumption	1.5W
Input Dynamic Range	±5V or ±10V

PERFORMANCE

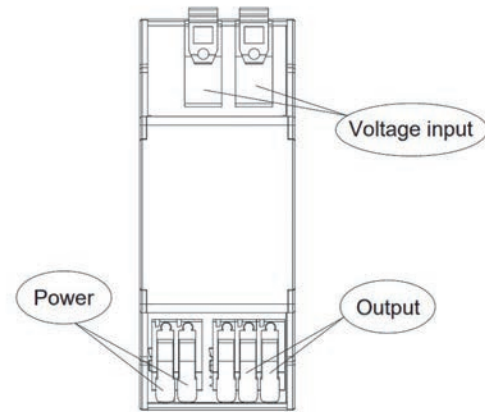
Input-Output non-linearity	< 70 ppm
Output current	4-20mA
Gain temperature drift	±50 ppm/°C
Common mode rejection at 60Hz	105 dB
Bandwidth	500kHz
Power Supply Voltage	12 - 36V
Output type	Current loop
Differential Input impedance	> 10 MΩ
Common mode impedance	> 2 GΩ 4pF
Maximum Output Load	500Ω

MECHANICAL

Mounting Type	DIN Rail
Connectivity (Connector for power in and signal out to/from the sensor)	Spring Cage connector
Outer Dimensions	3.5" x 2.5" x 1.4"
Weight	77.8 g (2.75 oz)

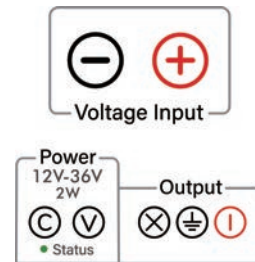
HARDWARE DESCRIPTION

The voltage input connector is located at the top of the module in the figure below. A connector that servers to power the unit, ground and output the sensor signal lay along the bottom.



V2I connectivity

The V2I module is designed to mount on standard NS-35 or NS32 DIN rails with minimal preparation, providing users ease of use and flexibility.



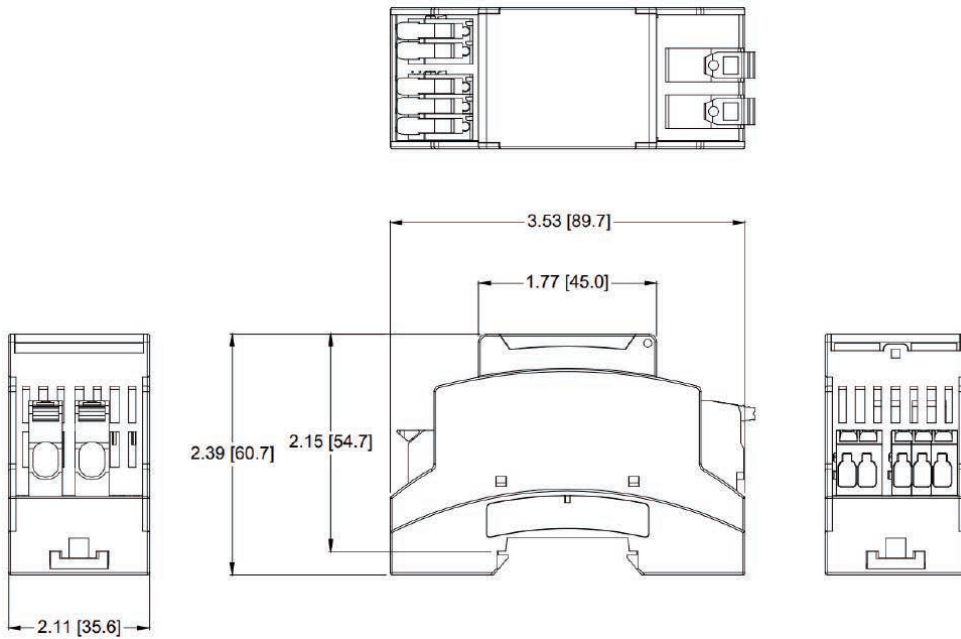
Wiring diagram

Signals are connected into the V2I via the Spring Cage connector and routed as the wiring diagram above.

ENVIRONMENTAL

Operating temperature	- 25 to 70 °C
Storage temperature	- 40 to 80 °C

MERCHANICAL DIMENSIONS



HARDWARE CONFIGURATION

- I Connect external power source to power the unit. For proper functioning the power supply should provide a voltage as specified with at least 0.2A of continuous current and 0.4A surge during module start-up.
- II Securely connect one end of a twisted pair to the output terminals, and the other end to the inputs of your data acquisition unit.
- III Pass conductor through aperture and observe orientation for proper signal polarity.

