



Precision Voltage to Current Converter Model 64-VCC

Features

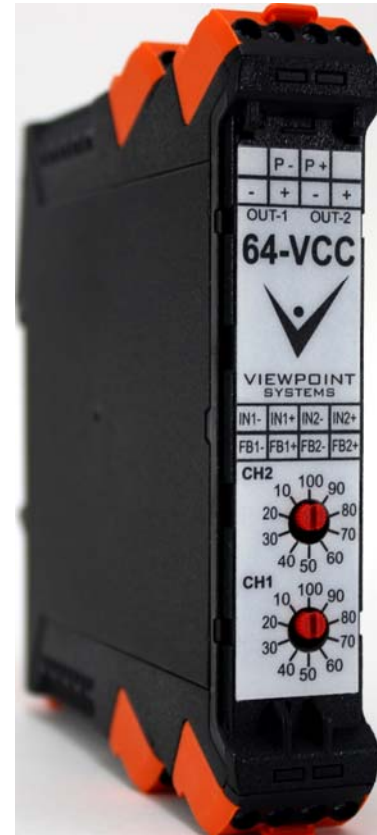
- ◆ Dual Fully Independent Channels
- ◆ ± 10 V Inputs
- ◆ Bipolar Current Outputs
- ◆ 24 VDC Powered (18-36 VDC)
- ◆ Outputs are Diode Protected
- ◆ DIN Rail Enclosure
- ◆ Read-back of Output Current

Applications

- ◆ Valve Driver
- ◆ Precision Current Driven Applications
- ◆ Voltage to Current Conversion

General Description

The 64-VCC precisely converts voltage to current. The unit can be placed in-line with a data acquisition system to achieve outstanding conversion accuracy for precise movements in valves or motors. The unit includes a unique current feedback measurement output to precisely monitor actual current in critical applications.



Key Specifications

- ◆ Full scale current outputs from ± 10 mA to ± 100 mA (switch selectable)
- ◆ $\pm 0.05\%$ Calibrated Accuracy
- ◆ Drives up to 100Ω at 100 mA
- ◆ Current Measurement Feedback accuracy up to $\pm 0.05\%$ calibrated.

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64-VCC Specifications

Input (Channel 1, 2)

Input Range: ± 10 Volts

Absolute Max input: ± 20 Volts

Input Impedance : 100 k Ω

Outputs (Channel 1, 2)

Current Outputs: 0 to ± 10 mA up to 0 to ± 100 mA , Switch selectable in 10 mA Full scale steps. (Diode Protected)

Current Feedback Outputs: 0 to ± 10 V represents 0 to \pm FS Current Output

Output (-) cannot be tied to common of input.

Power

Input: 24 VDC Nominal (18-36 VDC Range)

Power Consumption: 17 Watts

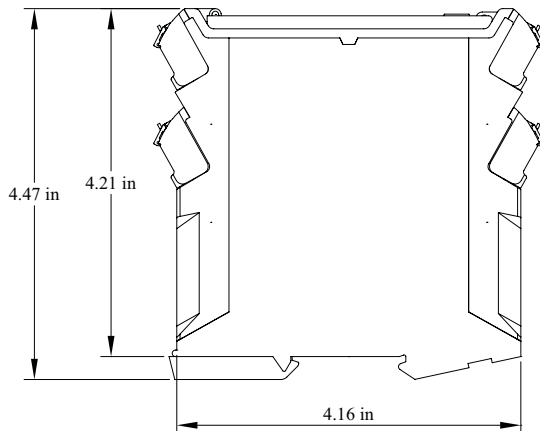
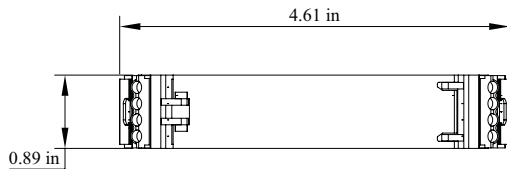
Isolation: 1500 VDC, Power to Input or Output

Environment

0 to 70 °C operating, -40 to 85 °C storage

Options

Higher bandwidth, +/- 15 VDC supplies (consult factory)



Output Accuracy (%Reading)

Un-Calibrated Overall: $\pm 1.5\%$, Calibrated*: $\pm 0.05\%$

Current Feedback Accuracy (%Reading)

Un-Calibrated: $\pm 2\%$, Calibrated*: $\pm 0.05\%$

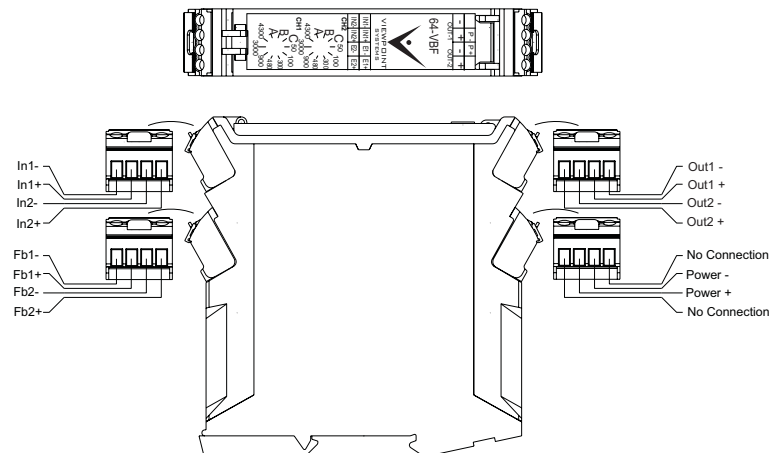
* Calibration is done externally to unit (in user software)

Bandwidth (BW)

Output = 10mA		Output = 100mA	
RLoad (Ω)	3dB BW (Hz)	RLoad (Ω)	3dB BW (Hz)
1.17k	4.35k	100	6.37k
550	8.86k	50	10.7k
117	24.9k	10	24.2k
12	31.9k	1	31.8k

Drive Capability

Output Current (mA)	Max Vout (V)	Max Load Resistance (Ω)
100	9.8	98
90	10.0	111
80	10.1	126
70	10.3	147
60	10.5	174
50	10.6	212
40	10.8	269
30	11.0	366
20	11.2	558
10	11.3	1135



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Wiring Diagram

Rev A1