



Features

Use with VT1415A/VT1419A/VT1422A

8-channel Non-isolated Current Source

Over-voltage Protection

Source ± 10 mA with up to 15 V Compliance

8-channel Current Output SCP

Overview

The VXI Technology VT1532A 8-channel Current Output SCP provides eight channels of non-isolated current source outputs. Each output can source ± 10 mA with up to 15 V compliance.

Each channel has over-voltage protection to protect the SCP and A/D from damaging voltage levels (>21 V) applied to its outputs. You can connect two channels in parallel to use with 4 - 20 mA control loops. Power limitations will allow only seven (7) VT1532A SCPs to be installed in a VT1415A, VT1419A, or VT1422A.

Use the VT1532A with the following VXI modules:

Model	Description
VT1415A	Algorithmic Closed Loop Controller
VT1419A	Multifunction Measurement and Control Module
VT1422A	Remote Channel Multifunction DAC

Refer to the VXI Technology Website for recent product updates, if applicable.

Specifications

Maximum Input Voltage
(Non-operating externally applied voltage without damage applied to any output Hi terminal)

Damage level: $>\pm 42$ V peak

Noise
20 Hz to 250 kHz into 250 Ω <2 μ A rms

Current Output

Range: ± 10 mA (Full-scale at $>\pm 15$ V compliance)

Resolution: 16 bits = 316 nA (monotonic to 16 bits)

Accuracy: ($\pm 0.06\%$ of expected output) $\pm (3.3 \mu$ A offset error)

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Temperature coefficient

Accuracy: $\pm 0.004\%/^{\circ}\text{C}$
Offset error: $0.3 \mu\text{A}/^{\circ}\text{C}$

Settling time: 350 μs with 250 Ω load

Output impedance: $>\pm 600 \text{ k}\Omega$

Power Required

$\pm 5 \text{ V}$:
Typical: 11 mA
Maximum: 15 mA

$\pm 24 \text{ V}$:
0 mA output typical: 60 mA
0 mA output maximum: 75 mA
10 mA output typical: 135 mA
10 mA output maximum: 150 mA

Current Requirements (Amps)

5 V max	24 V max	-24 V max
0.011	0.065	0.065

Ordering Information

VT1532A

VT1532A

8-channel Current Output SCP

Acquisition