

The V275 is a single-width, C-size, register-based, VXIbus module for generating eight output voltages. The standard output is 0 to +10 V with a maximum load of 5 mA.

Options of the module are available with output ranges of 0 to +5 V, ± 2.5 V, ± 5 V, and ± 10 V.

APPLICATIONS

Industrial control
Automatic Test Equipment (ATE)
General-purpose control applications

V275 8-channel, 12-bit DAC



An economical choice for low-channel-count applications

FEATURES

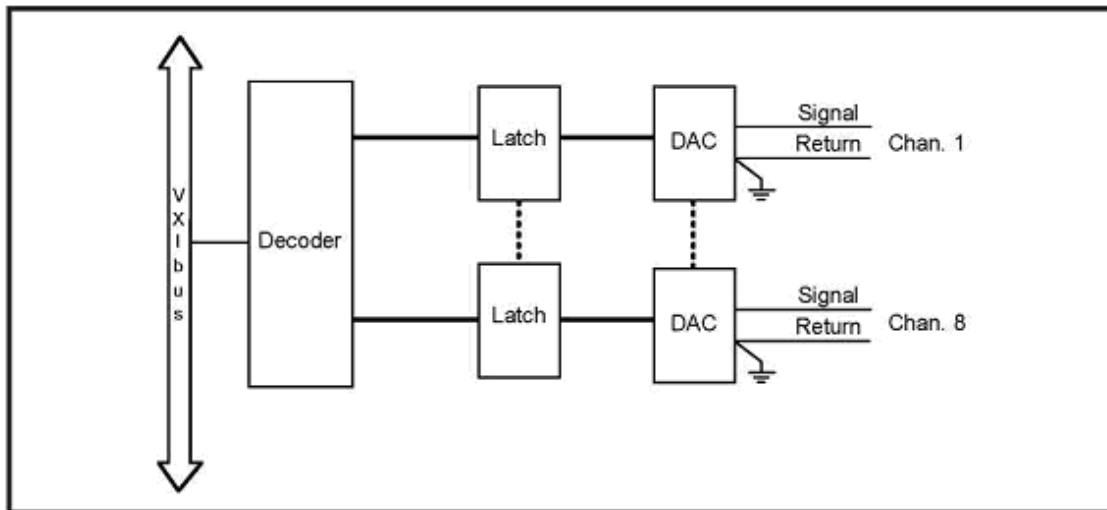
- 8 independent analog outputs
- 5 output voltage options
- 12-bit resolution (one part in 4096)
- 5 mA drive capability
- Low drift
- 4 μ s settling time
- Outputs reset to 0 V at power-on

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The V275 is calibrated at the factory for zero offset and accurate gain. All outputs are referenced to a common ground (module ground). In critical applications, these signals should be received by differential input circuits.

The V275 supports both static and dynamic configuration. Access to the dual-ported memory is via memory locations pointed to by the Offset Register within the VXIbus Configuration Register set, using A24/16, D16 data transfers. All eight channels are accessed using the same VXIbus address.

V275 Block Diagram





ITEM	SPECIFICATION
Number of Channels	8
Full-scale Output	0 to +10 V, 0 to +5 V, ± 2.5 V, ± 5 V, and ± 10 V (by order option)
Resolution	12 bits (one part in 4096)
Linearity Error	$\pm 1/2$ LSB
Monotonicity	Monotonic to 12 bits
Output Impedance	Less than 0.1 Ω
Output Current	± 5 mA
Output Protection	Can withstand short circuit to ground
Settling Time	4 μ s, maximum to within Vi LSB for a 20 V change
Output Connector Types	2-contact LEMO connectors
Mating Connectors	KineticSystems Model 5911-Z1A
Power Requirements +5 V +24 V -24 V	1.6 A, typical 100 mA, typical 200 mA, typical
Environmental and Mechanical Temperature range Operational Storage Relative humidity Cooling requirements Dimensions Front-panel potential	0°C to +50°C -25°C to +75°C 0 to 85%, non-condensing to 40°C 10 CFM 340 mm x 233.35 mm x 30.48 mm (C-sized VXIbus) Chassis ground

RELATED PRODUCTS

Model 5857-Cxyz Cable—2-contact LEMO to Unterminated
 Model 5857-Dxyz Cable—2-contact LEMO to 2-contact LEMO
 Model 5857-Gxyz Cable—1-contact LEMO to BNC shielded
 Model 5 911 -Z1A Connector—2-contact LEMO

ORDERING INFORMATION

MODEL	DESCRIPTION
V275-MA11	8-channel, 12-bit D/A converter; 0 to +5 V output
V275-MB11	8-channel, 12-bit D/A converter; 0 to +10 V output
V275-MC11	8-channel, 12-bit D/A converter; ± 2.5 V output
V275-MD11	8-channel, 12-bit D/A converter; ± 5 V output
V275-ME11	8-channel, 12-bit D/A converter; ± 10 V output

Updated October 24, 2005

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