High-Precision Analog Source and Digital I/O Module for VXI

VXI-AO-48XDC

High-Precision Analog Output
18-bit resolution
48 current outputs
48 voltage outputs
Programmable power state
Digital I/O
32 bidirectional lines
VXI*plug&play* Compliant
Frameworks – WINNT, GWINNT,
   WIN95, GWIN95, WIN, GWIN

NI-DAQ Software
Windows NT/95/3.1

Virtual Instrument Drivers
Digital I/O
Analog Source

Application Software
LabVIEW
BridgeVIEW
LabWindows/CVI
ComponentWorks

Overview

The VXI-AO-48XDC is a high-precision analog source module for VXI systems. It has 48 voltage outputs and 48 current outputs, so that you can generate as many as 96 analog signals with 18-bit resolution. The VXI-AO-48XDC also includes 32 bidirectional digital I/O lines that you can interface to a wide range of digital devices.

You can use the VXI-AO-48XDC in many applications, such as electronic test, instrumentation, process monitoring and control, and machine automation. You can use the VXI-AO-48XDC as set point, programmable voltage source or for generating test signals in automated test equipment. For industrial applications, you can also use the high-compliance, 0-20 mA current source capability in process control loops. The digital I/O lines can interface to external digital circuitry and/or digital devices including switches and relays. For detailed hardware specifications, refer to the VXI catalogue.

Analog Output Channels

The VXI-AO-48XDC provides high-precision 18-bit D/A resolution for separate 48 current and 48 voltage outputs. You can program each output level independently. The current or voltage output update rate is dependent on the VXI controller configuration and the settling time of the amplifier.

Digital I/O

The VXI-AO-48XDC has 32 digital I/O channels available as four 8-bit TTL-compatible ports that can be independently configured as input or output ports.

Calibration

The calibration of the VXI-AO-48XDC is performed by software. The instrument module is calibrated at the factory in accordance with the specifications; the calibration data is stored on the onboard EEPROM nvRAM.

Part Numbers

VXI-AO-48XDC and software 777417-01
96-Pin Connector Blocks and Cables
VXI-TB-296 front panel terminal
    block and carrier 777350-02
TBX-96 DIN-rail mountable connector block 777264-01
SH96-96 96-pin to 96-pin shielded cable
    1 m 183228-01
    2 m 183228-02
    5 m 183228-05

Data Acquisition