

PXI/DAQ/DAQe-2500 Series

4/8-CH 12-Bit 1 MS/s Analog Output Multi-Function DAQ Cards



PXI-2502



DAQ-2502



DAQe-2502

Ordering Information / Quick Selection Guide

Model Name	Analog Output				Analog Input				DIO		Timer/Counter
	No. of channels	Resolution	Update rate	Output range	No. of channels	Resolution	Sampling rate	Input range	No. of channels	No. of channels	
PXI/DAQ/DAQe-2501	4	12 Bit	1 MS/s	±10 V, 0 to 10 V	8	14 Bit	400 kS/s	±10 V or 0 to 10 V	24-CH 8255 PIO	2-CH, 16-Bit	
PXI/DAQ/DAQe-2502	8	12 Bit	1 MS/s	±10 V, 0 to 10 V	4	14 Bit	400 kS/s	±10 V or 0 to 10 V	24-CH 8255 PIO	2-CH, 16-Bit	

Specifications

Model Name	PXI/DAQ/DAQe-2501	PXI/DAQ/DAQe-2502
Analog Output		
Number of channels	4 voltage outputs	8 voltage outputs
Resolution	12 Bit	
Output ranges	0-10 V, ±10 V, 0-AOEXTREF, ±AOEXTREF	
Maximum update rate	1 MS/s	
Slew rate	20 V/μs	
Settling time	3 μs to ±0.5 LSB accuracy	
Offset error	±8 mV	
Gain error	±0.04% of max. output	
Driving capacity	±5 mA	
Stability	Any passive load, up to 1500 pF	
Trigger sources	Software, external digital/analog trigger, SSI bus	
Trigger modes	Post-trigger, delay-trigger, and repeated trigger	
FIFO buffer size	8 k samples	16 k samples
Data transfers	Programmed I/O, scatter-gather DMA	
Analog Input		
Resolution	14 Bit, no missing codes	
Number of channels	8 single-ended	4 single-ended
Maximum sampling rate	400 kS/s	
Gain	1	
Bipolar input ranges	±10 V	
Unipolar input ranges	0-10 V	
Offset error	±4 mV	
Gain error	±0.1% of FSR	
Input coupling	DC	
Overvoltage protection	Power on: Continuous ±30 V, Power off: Continuous ±15 V	
Input impedance	1 GΩ/6 pF	
Trigger sources	Software, external digital/analog trigger, SSI bus	
Trigger modes	Post-trigger, delay-trigger, and repeated trigger	
FIFO buffer size	2 k samples	
Data transfers	Polling, scatter-gather DMA	
Digital I/O		
Number of channels	24-CH 8255 programmable input/output	
Compatibility	5 V/TTL	
Data transfers	Programmed I/O	
Timer/Counter		
Number of channels	2	
Resolution	16 Bit	
Compatibility	5 V/TTL	
Base clock available	40 MHz, external clock up to 10 MHz	
General Specifications		
Auto Calibration	Yes (+5 V, ±2 ppm/°C)	
Dimensions	160 mm x 100 mm (6.24" x 3.9") (not including connectors) (PXI-2500 series) 175 mm x 107 mm (6.82" x 4.17") (not including connectors) (DAQ-2500 series) 168 mm x 107 mm (6.55" x 4.17") (not including connectors) (DAQe-2500 series)	
Connector	68-pin VHDCI female	
Operating temperature	0°C to 55°C (32°F to 131°F)	
Storage temperature	-20°C to 70°C (-4°F to 158°F)	
Humidity	5 to 95%, non-condensing	
Power requirements	+5 V 1.6 A typical (PXI/DAQ-2501) +3.3 V 0.78 A, +12 V 0.66 A typical (DAQe-2501)	+5 V 2.12 A typical (PXI/DAQ-2502) +3.3 V 0.89 A, +12 V 0.76 A typical (DAQe-2502)

Features

- Supports a 32-Bit 3.3 V or 5 V PCI bus (DAQ-2500 series)
- PXI specification Rev 2.2 compliant (PXI-2500 series)
- x1 lane PCI Express® Interface (DAQe-2500 series)
- Hardware-based arbitrary waveform generation
- Onboard 8 k-sample D/A FIFO (PXI/DAQ/DAQe-2501)
- Onboard 16 k-sample D/A FIFO (PXI/DAQ/DAQe-2502)
- Programmable bipolar or unipolar analog output ranges / internal or external reference sources on per channel basis
- 8-CH 400 kS/s 14-Bit single-ended analog inputs (PXI/DAQ/DAQe-2501) ; 4-CH 400 kS/s 14-Bit single-ended analog inputs (PXI/DAQ/DAQe-2502)
- Onboard 2 k-sample A/D FIFO
- Bipolar or unipolar analog input ranges
- Scatter-gather DMA for both analog inputs and outputs
- 24-CH TTL digital input/output
- 2-CH 16-Bit general-purpose timer/counter
- Analog & digital triggering
- Fully auto-calibration
- Multiple cards synchronization through SSI (System Synchronization Interface) bus or PXI trigger bus
- Supported Operating System
 - Windows 7/8 x64/x86, Linux
- Driver and SDK
 - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET
- Software Utility
 - AD-Logger

Terminal Boards & Cables

- DIN-68S-01
- ACL-10568-1
- ACL-SSI-2/3/4

* For more information on mating terminal board and cables, please refer to P3-48/49.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Data Logging & Acquisition](#) category:

Click to view products by [ADLINK Technology](#) manufacturer:

Other Similar products are found below :

[PCI-6308A](#) [KEW8309](#) [SpotBotBLE](#) [USB-4711A-BE](#) [PXES-2780 Rack-Mount kit](#) [6069-410-061](#) [U2351A](#) [SE028](#) [PCI-1761-BE](#)
[AR207/8/S1/PPPP/IP65](#) [984405500](#) [PCI-1711UL-CE](#) [PCI-1762-BE](#) [USB-4702-AE](#) [USB-4704-AE](#) [USB-4716-AE](#) [USB-4751-AE](#) [PCI-](#)
[1714U-BE](#) [PCIE-6208V-GL](#) [PCIE-1810-AE](#) [LPCIE-7250](#) [USB-4751L-AE](#) [PCI-1760U-BE](#) [PCI-6216V-GL](#) [PCI-7296](#) [PCI-1721-AE](#) [PCI-](#)
[6208V-GL](#) [PCI-1747U-AE](#) [PCI-1720U-BE](#) [PCI-1780U-AE](#) [PCM-3718HG-CE](#) [PCM-3718HO-BE](#) [USB-7230](#) [ND-6050](#) [PCI-1713U-BE](#)
[AR207/8/S1/PPPP/IP30](#) [U2781A](#) [EL-USB-5](#) [AR407/S1/P/P/P/P](#) [ACL-7122](#) [AR207/8/S2/PPPP/IP30](#) [ACL-8112PG](#) [DAQ-2204](#) [DAQ-2206](#)
[DAQ-2213](#) [DAQ-2501](#) [DAQe-2213](#) [DAQe-2214](#) [DAQe-2502](#) [ND-6017](#)