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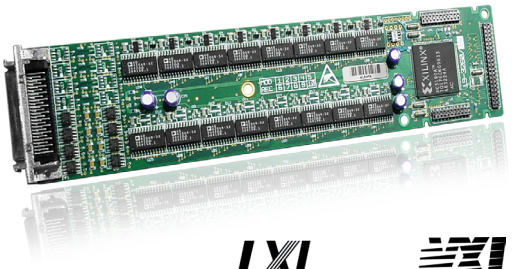
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Find the *Bustec 3150-AA* at our website: *Click HERE*

bustec
WHEN ACCURACY MATTERS

ProDAQ Data Acquisition Function Cards

ProDAQ 3510 16-Channel, 16-Bit DAC Function Card



LXI VXI bus

OVERVIEW

The ProDAQ 3510 Digital-to-Analog Converter Function Card is one of the ProDAQ high density cards, which can be fitted into the ProDAQ Motherboards. ProDAQ modules are the most versatile VXIbus modules in the market. They provide the user with the highest channel density and functionality available today.

This high density card contains 16 independent, 16-bit DAC channels. Each channel is equipped with his own DAC. The ProDAQ 3510 DAC Function Card is specially designed for DC, low frequency and current loop applications.

There are three different standard voltage output versions of the ProDAQ 3510 available with ranges of either 0 to 10V, ±10 V or ±20 Volt, and one current output version with programmable ranges of 4-20 mA, 0-20 mA or 0-24 mA. Three other standard versions provide output ranges suitable for thermocouple simulation: ±50 mV for thermocouple types B, and C; 0 to 50 mV for thermocouple types N, R, S and T; 0 to 100 mV for thermocouple types E, J and K. Versions with custom output ranges are available on request.

All voltage outputs have continuous short circuit protection. All current outputs have an overvoltage protection. If high current is used on multiple channels the number of DAC cards that can be installed into one motherboard module may be restricted due to the supply limitations in the VXIbus power specifications.

ProDAQ modules provide compability with all current popular software environments and allow users to safely and simply expand their existing hardware and software systems.

The ProDAQ 3510 DAC Function Card is supplied with VXIplug&play drivers for Windows. Drivers for Linux and VxWorks are available on request.

All **ProDAQ function cards** can be used in both ProDAQ VXIbus motherboards and LXI function card carriers, providing users with the highest channel density and functionality available today.

Features & Benefits

- **16 independent DACs**
- **16-bit resolution**
- **Different output ranges** available
- **Voltage** or **Current Output Versions**
- **Thermocouple simulation**
- **Flexible triggering**
- **Up to 128 DAC channels** per VXIbus Slot or 1U 19inch rack space

For more information, visit **www.bustec.com**.

Learn more about the **ProDAQ 3510** on our website by scanning the code below.

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SPECIFICATIONS

SAMPLING	
Resolution	16-bit
Number of Channels	16

OUTPUT CHARACTERISTICS	3510-Ax/-Bx/-Tx (Voltage Versions)
Output Range	0-10 V, ±10 V, ±20 V
Output Current	5 mA per channel
Output Coupling	DC
Cut-off Frequency	280 Hz
Output Impedance	< 0.05 Ω max.
Settling Time	< 5 msec to 0.1 % FSR (resistive load)
Offset	< 1 mV typical (calibrated)
Accuracy	< ±(0.01 % Setting + 1.5 LSB)
Current Consumption	Voltage (V) / Current (mA) +24 / 100 +12 / 100 +5 / 150 -12 / 100 -24 / 100

	3510-CC (Current Version)
Output Range	0-20 mA, 0-24 mA (Overrange Function), 4-20 mA
Current Loop Voltage Compliance	21.5 V
Output Filter Bandwidth	100 Hz
Output Impedance	25 Ω
Output Protection	Diode clamped to +24 V and Ground
Settling Time	3.5 msec with 500 Ω (load dependent)
Offset	+9 µA typical
Accuracy	0.16 % typical (FSD)
Output Nonlinearity	0.012 % max
Current Consumption	Voltage (V) / Current (mA) +24 / 80 -24 / 80 +5 / 120

FRONT PANEL I/O	
Connectors	50-pin SCSI female

PHYSICAL CHARACTERISTICS	
Dimensions	230 x 53 mm
Weight	79 g

ENVIRONMENTAL	
Temperature	0 °C to +50 °C (operational) -40 °C to +70 °C (storage only)
Humidity	10 % - 90 % (non-condensing)
Warm-up Time	< 30 minutes

SUPPORT	
Software support	Driver support for Microsoft Windows, VxWorks, and Linux (Contact Bustec Ltd. for more information)
Configuration	Cards can be factory installed or field installed by user
Warranty Period	12 months (extended periods available at additional cost)

Ordering Information

- **3510-AB** 16-ch., 16-bit DAC, 0-10 V output
- **3510-BB** 16-ch., 16-bit DAC, ±10 V output
- **3510-BC** 16-ch., 16-bit DAC, ±20 V output
- **3510-CC** 16-ch., 16-bit DAC, current output
- **3510-TB** 16-ch., 16-bit DAC, ±50 mV, TC Types B/C
- **3510-TN** 16-ch., 16-bit DAC, 0-50 mV, TC Types N/R/S/T
- **3510-TK** 16-ch., 16-bit DAC, 0-100 mV, TC Types E/J/K
- **Other ranges available**

Related Products

- **ProDAQ 8010** data I/O cable, 50-pin SCSI to 50-pin SCSI connectors
- **ProDAQ 8011** data I/O cable, 50-pin SCSI to unterminated

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