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WHEN ACCURACY MATTERS

ProDAQ LXI
Data Acquisition Systems

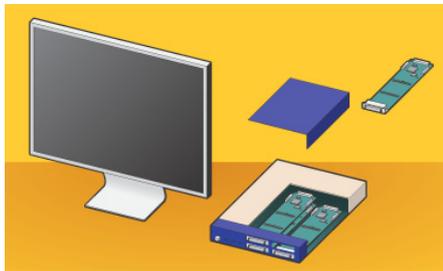## ProDAQ 6100 LXI Function Card Carrier

OVERVIEW

The ProDAQ 6100 LXI function card carrier provides access to up to four ProDAQ function cards through a standard Gigabit LAN port. Its small form factor and connectivity, combined with the flexibility of the ProDAQ function cards, lets you create multifunction instruments customized to your application. Simply connect the ProDAQ 6100 to your network and use the standard software drivers or embedded Web server for easy system integration.

LAN Interface

The ProDAQ 6100 is a fully compliant LXI Revision 1.3 Class B device (Class A with the optional LXI Trigger Interface), providing a Gigabit Ethernet interface, a synchronization API and support for the IEEE 1588 protocol. The IEEE 1588 protocol allows devices to execute triggered functions equivalent to those available over GPIB and achieve synchronization of the system and data acquisition clocks over Ethernet with accuracy within 20 nanoseconds (FWHM).

Trigger Interface

The optional trigger interface for LXI Class A support allows devices to connect using a physical daisy chain or star configuration. Based on an eight-channel multipoint LVDS signaling system, it allows devices to be sources and/or receivers of trigger and clock signals. Using a wired-OR configuration allows multiple devices to respond to a trigger signal or share a common clock.

ACCESSORIES

Rack-Mount Tray

The ProDAQ 6210 rack-mount tray can be used to mount one or two ProDAQ 6100 carriers into a standard 19 in. rack at only 1U height.

Voltage Reference

The ProDAQ 6100 can be equipped with a high-precision ProDAQ 3202 voltage reference plug-in module to allow the calibration of function cards on-the-fly. With one software command, the user can perform an entire system calibration of every channel at every range. The ProDAQ 3202 is automatically programmed to each level to coordinate the calibration. Two standard 2 mm connectors on the rear panel allow the testing of an installed voltage reference plug-in module or the input of an external reference signal.

LXI

Features & Benefits

- **1U 19 in. half-wide LXI carrier** for ProDAQ function cards

- **Slots** for four ProDAQ function cards

- **Gigabit LAN interface** with IEEE 1588 support

- **Optional LXI M-LVDS** trigger interface

- Optional **high-precision voltage** reference

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

Learn more about the
ProDAQ 6100 on our website
by scanning the code below.

SPECIFICATIONS

FUNCTION CARD INTERFACE

Number of Slots	4 single-wide card slots
Interface Width	16/32-bit
Interface Speed	Up to 120 MB/s

LAN INTERFACE

Type	10/100/1000 BASE-T IEEE 802.3 compliant
Auto-MDIX	Yes
Connector	RJ-45
Protocols	TCP/IP, HTTP, VXI-11, IEEE 1588, mDNS

LXI DEVICE CAPABILITIES

LXI Version	1.3
LXI Device Class	Class A (ProDAQ 6100-BA and ProDAQ 6100-BB) Class B (ProDAQ 6100-AA and ProDAQ 6100-AB)
Programmatic Interface	Embedded web server VXI-11 device with instrument discovery IVI/VXI*plug&play* compatible driver

IEEE 1588

Version	IEEE 1588-2008
Profile	Compatible with LXI IEEE 1588 profile 1.0
Clock Class	Ordinary clock
Time Source	Internal oscillator
Timestamp Accuracy	10 ns

LXI TRIGGER INTERFACE (optional)

Lines	8 M-LVDS lines, LXI Class A trigger bus compatible
Input Trigger Pulse Width	Minimum 20 ns
Connector	25-pin Molex 83619-9011

LXI EVENT INTERFACE

Supported LXI Events	LXI0-7, LAN0-7

POWER SUPPLY

Input Voltage	85-265 VAC, 47-63 Hz
Current Consumption	1.6 A maximum
Function Card Supply	±15V, ±12V, 5V, -2V, -5.2V ±24V with HV Power Supply Option

PHYSICAL CHARACTERISTICS

Dimensions	210mm x 40mm x 340mm (W x H X D)
Weight	2700 g (without function cards installed)

ENVIRONMENTAL

Temperature	0°C to +50°C (operational) -40°C to +70°C (storage only)
Humidity	10% - 90% (non-condensing)

WARRANTY PERIOD

12 months (extended periods available at additional cost)

Ordering Information

- **6100-AA** LXI card carrier
- **6100-AB** LXI card carrier with HV power supply option
- **6100-BA** LXI card carrier with trigger interface
- **6100-BB** LXI card carrier with trigger interface and HV power supply option

Accessories

- 19 in. rack-mount tray

Related Products

- **ProDAQ 3400** Series analog-to-digital converter (ADC) function cards
- **ProDAQ 3500** Series digital-to-analog converter (DAC) function cards
- **ProDAQ 3600** Series digital I/O (DIO) function cards
- **ProDAQ 3800** Series counter/timer function cards
- **ProDAQ 3900** Series miscellaneous function cards

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