

PXI-6212 8-Channel High-Speed Data Acquisition Module

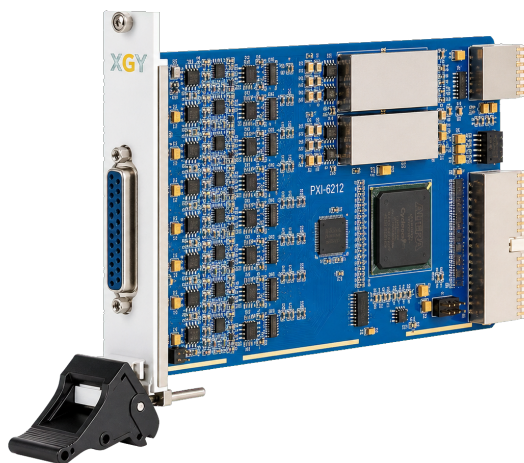
14-bit 125 MSa/s parallel CPCI/PXI acquisition module for high-dynamic-range signals

At a Glance

PXI-6212 is an 8-channel high-speed parallel data acquisition module for PXI-based systems.

The module provides 14-bit resolution and up to 125 MSa/s sampling rate per channel for high-frequency, high-dynamic-range signals.

It supports independent input channels, multi-module synchronized acquisition, seven configurable input ranges, and onboard storage up to 1G samples.

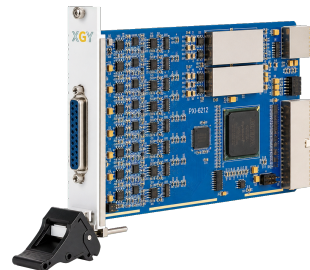


PXI-6212 8-Channel High-Speed Data Acquisition Module

Product Overview

PXI-6212 provides eight synchronous analog input channels in a compact 3U CPCI/PXI module.

The module is suitable for transient signal acquisition, impact testing, ultrasonic and acoustic measurement, communications, aerospace, defense, and other time-domain or frequency-domain measurement tasks.



Key Features

- **Eight Synchronous Inputs**

Eight analog input channels support synchronized high-speed acquisition.

- **14-Bit, 125 MSa/s**

Each channel supports 14-bit resolution with sampling rates up to 125 MSa/s.

- **Configurable Ranges**

Input ranges include ± 10 V, ± 5 V, ± 1 V, ± 0.5 V, and ± 0.1 V.

- **Multi-Module Sync**

Multi-module synchronized acquisition supports larger channel-count systems.

- **Large Onboard Storage**

Storage options include 256M, 512M, and 1GB sample capacities.

- **Flexible Input Path**

AC/DC coupling and 1 Mohm / 50 ohm input impedance are supported.

Technical Specifications

Input and Acquisition	
Input Channels	8 channels
Acquisition Mode	Parallel acquisition
Sampling Rate	125 MSa/s
Resolution	14 bits
Input Range	+/-10 V, +/-5 V, +/-1 V, +/-0.5 V, +/-0.1 V configurable
Coupling	AC/DC
Input Impedance	1 Mohm / 50 ohm
Accuracy and Storage	
DC Accuracy	+/-0.25% FSR for >=1 V ranges; +/-0.50% FSR for <1 V ranges
AC Accuracy	+/-0.75% FSR, f < 300 kHz
Storage Capacity	256M / 512M / 1GB
Synchronization Accuracy	8 ns
SNR	65 dBFS
System	
Operating System	Windows 7 / Windows 8 / Windows 10 / Linux
Driver Support	VISA-based PNP driver
Form Factor	3U single-width, 4HP

Environmental Grades

Condition	Commercial C	Industrial I	Military J
Operating Temperature	0 to +50 deg C	-20 to +50 deg C	-40 to +50 deg C
Storage Temperature	-20 to +70 deg C	-40 to +70 deg C	-55 to +85 deg C
Humidity	95% @ 25 deg C, non-condensing	95% @ 25 deg C, non-condensing	95% @ 25 deg C, non-condensing

Temperature values are specified in degrees Celsius.

Ordering Information

Model	Description	Availability
Default Configuration		
PXI-6212	8-channel parallel acquisition module; 14 bits; 125 MSa; commercial grade	Standard
PXI-6212-I	8-channel parallel acquisition module; 14 bits; 125 MSa; industrial grade	Optional
PXI-6212-J	8-channel parallel acquisition module; 14 bits; 125 MSa; military grade	Optional
3002015	SMB to Q9(BNC) cable, 1 m length	Standard

Default configuration is PXI-6212, 8-channel parallel acquisition module, 14 bits, 125 MSa, commercial grade. Ordering format is PXI-6212-X, where X selects the temperature grade: C for commercial grade, I for industrial grade, and J for military grade.

Packing List

Item	Description	Quantity
8-Channel High-Speed DAQ Module	8 channels; 14 bits; 125 MSa; commercial grade	1 unit
Accessory Cable	SMB to Q9(BNC) cable, 1 m length	9 sets
User Manual	Product use and maintenance information	1 copy
Certificate of Conformance	Factory inspection certificate	1 copy

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Specifications subject to change without notice. Per AS/NZS standards.