

NXI Modular Instrument Guide

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NXI-6100-32/12 High Speed Data Acquisition Module



Product Introduction

NXI-6100-32/12 is a 12-bit 32-channel analog input& 2-channel analog output high speed data acquisition module, it supports 1.25MS/s input sample rate and 1MS/s output sample rate. NXI-6100-32/12 comes with FIFO, and supports user-defined waveform output. It can be widely used in voltage signal acquisition, data processing and analysis in multiple fields and scenarios, such as 3C consumer electronics, industrial control, and research&education.

Application Fields



Electric Signal Acquisition



Electronic Controller Testing



Industrial Controls



Integrated Test Systems

Main Features

- ▶ Analog input: $\pm 10V/\pm 5V/\pm 1V/\pm 200mV$
- ▶ 32 analog input channels can be turned into 16 channels differential inputs
- ▶ Support 2 channel analog output
- ▶ Analog output range: $\pm 10V$
- ▶ Input/output resolution: 12 bits
- ▶ Total input sampling rate: 1.25MS/s
- ▶ Output sampling rate 1MS/s
- ▶ Acquisition memory capacity: 16MB
- ▶ Support user-defined waveform output with 2048KB cache capacity
- ▶ Single module with single slot, applicable to NXI-F1000 chassis or independent use
- ▶ Support 12V DC power supply, LAN communication for individual control

Technical Data Sheet

Model	NXI-6100-32/12			
Analog Input				
Channels	32			
Max. Range	±10.5V			
Total Sampling Rate	1.25MS/s			
Range	±10V	±5V	±1V	±200mV
Resolution	5mV	2.5mV	0.5mV	0.09mV
Gain Temperature Coefficient	30ppm/°C			
Reference Source Temperature Coefficient	15ppm/°C			
Accuracy (25±5°C)	0.19%F.S.	0.18%F.S.	0.25%F.S.	0.25%F.S.
Common Mode Rejection Ratio	90dB			
Input Impedance	Channel closed: 10GΩ 100pF		Channel open: 35MΩ	
Input Bias Current	25pA			
Analog Output				
Channels	2			
Sampling Rate	1MS/s			
Resolution	12-bit			
Output Full Scale Range	±10V			
Gain Temperature Coefficient	30ppm/°C			
Reference Source Temperature Coefficient	25ppm/°C			
Output Impedance	0.2Ω			
Output Current	30mA			
Voltage Output Conversion Rate	32V/μs			
Others				
Test Terminal	MDR Connector, 50pin			
Operating Power	12VDC±10%, <0.5A			
Communication Interface	LAN			
Temperature	Working temperature: 0°C~40°C; Storage temperature: -20°C~60°C			
Operating Environment	Altitude: <2000m; Relative humidity: 5%~90%RH (no condensation); Operating air pressure: 80~110kPa			
Dimensions	130.5mm(H)*20mm(W)*230.5mm(D)(with puller)			

Note 1: For more and latest information, please contact NGI.

Note 2: For other specifications, please contact NGI.