

## 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
- ▶ Support Modbus-RTU, SCPI protocols

## Technical Data Sheet

Model	NXI-6100-32/12			
Analog Input				
Channels	32			
Max. Range	$\pm 10.5V$			
Total Sampling Rate	1.25MS/s			
Range	$\pm 10V$	$\pm 5V$	$\pm 1V$	$\pm 200mV$
Resolution	5mV	2.5mV	0.5mV	0.09mV
Gain Temperature Coefficient	30ppm/ $^{\circ}C$			
Reference Source Temperature Coefficient	15ppm/ $^{\circ}C$			
Accuracy (25 $\pm 5^{\circ}C$ )	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: 10G $\Omega$   100pF		Channel open: 35M $\Omega$	
Input Bias Current	25pA			
Analog Output				
Channels	2			
Sampling Rate	1MS/s			
Resolution	12-bit			
Output Full Scale Range	$\pm 10V$			
Gain Temperature Coefficient	30ppm/ $^{\circ}C$			
Reference Source Temperature Coefficient	25ppm/ $^{\circ}C$			
Output Impedance	0.2 $\Omega$			
Output Current	30mA			
Voltage Output Conversion Rate	32V/ $\mu s$			
Others				
Test Terminal	MDR Connector, 50pin			
Operating Power	12VDC $\pm 10\%$ , <0.5A			
Communication Interface	LAN			
Temperature	Working temperature: 0 $^{\circ}C$ ~40 $^{\circ}C$ ; Storage temperature: -20 $^{\circ}C$ ~60 $^{\circ}C$			
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.