High-speed data acquisition and analysis system

Portable Chassis CAT Series

Large channel desktop chassis LION Series

Industrial Portable TIGER Series

Large channel IPC GIANT TIGER Series

Chassis Type	Portable equipment-CAT Series		
Number of input channels	4/8/16， Parallel sampling		
Output channels	1		
Sample rate (SPS)	0-2M	0 -5M	0-10M
Resolution (BIT)	16	16	16
Communication interface	Ethernet	Ethernet	Ethernet
Installation and multi-channel expansion mode	Multiple simultaneous expansion	Multiple simultaneous expansion	Multiple simultaneous expansion
Hardware Features Overview	High-precision, wide dynamic range, accurate measurement of weak signals; USB interface, plug and play, easy to connect with the host computer; compact design, easy to carry; simultaneous expansion interface, easy to composite to be a synchronization test system up to 1024 channels		

Chassis Type	Rackmount Chassis or stand-alone chassis-LION Series
Number of input	2~128channels, Parallel sampling

channels		
Output channels	1-2	1
Sample rate (SPS)	0-2M	2M-200M
Resolution (BIT)	16	12/14 /16 optional
Communication interface	Ethernet	Ethernet
installation and multi-channel expansion mode	Multi-card insert mode, a device with most 16 cards, single card has 2/4/8 channel; multiple device can be parallel expansion	
Hardware Features Overview	High-precision, wide dynamic range for accurate measurement of weak signals; LAN interface, access the Internet through the INTERNET easily, etc., can control of the equipment in any place; multi-card plug-in mode is designed, and single-card with 2 8-channels, it can be composed of a single flexible 2-128 channels test system by configuring different number of cards. It can used in -Rackmount Chassis for assembling into the cabinet to facilitate, or in independent chassis, to meet simultaneous measurement applications in a single equipment with multi-channel;	

Chassis Type	IPC -TIGER Series	
Number of input channels	2~64chanels, Parallel sampling	
Output channels	1-2	
Sample rate (SPS)	0-2M	2M-500M
Resolution (BIT)	16	12 /14 /16
Communication interface	Ethernet	Ethernet
installation and multi-channel expansion mode	PCI interface into IPC, a single card has the 2 / 4 channel; the maximum number of insert cards is decided by the IPC board, but not more than 18 slots generally	
Hardware Features Overview	High-precision, wide dynamic range for accurate measurement of weak signals; By insert into IPC though the PCI interface, it can be work in harsh environments with long time stability. It can easily connect to network through the LAN interface of the IPC.	

Option:

选项：

1 High vibration resistance (portable design): sine 20g, Shock of 100g

2 a wide temperature range: -40 to 85 ℃

3 anti-EMI design

4 universal conditioning Acquisition Module (including the strain conditioning modules, charge conditioning modules, ICP conditioning modules, displacement conditioning modules, speed conditioning and temperature conditioning module)

Application

- Materials Testing
- shock and vibration testing
- Drive development
- Performance testing
- test
- process monitoring
- power station and substation monitoring
- mechanical and electrical equipment R & D
- chemical reaction monitoring
- Crash Test switch
- Interference capture sound radiation

High-speed data acquisition software acquisition

Time-domain data is often studied in data acquisition applications. However, the frequency-domain data are often able to provide more extensive information. The time-domain and frequency domain data can be acquired at the same time by new NTI high-speed acquisition, and the data can be analysis deeply.

Modularization provide the conditions for sustainable development

NTI high-speed acquisition products provides a range of modular signal conditioning, and will provide more. The idea is to provide an instrument platform adapt to specific test.

Multi-functional design

◎ can condition signal of various forms sensor
◎ can be used as a high-speed transient recorder to capture key events
◎ can be used as a versatile FFT analyzer for 80kHz bandwidth real-time analysis of single or channels
◎ support standard of ICP and TEDS sensor
◎ Simultaneous acquisition of time domain and frequency domain data, simultaneously displayed according to user-selected

Feature-rich hardware

◎ Precision ADC, channel separation, anti-aliasing filter, and other more features to ensure high data accuracy.
◎ Two hard drives are dedicated to system software and data storage.
◎ Removable SATA data disk can be placed in a locked disk slot; you can ensure data security for data transmission.
◎ You can connect an external PC for data transfer.
◎ data output can be easily accomplished using an Ethernet connection
◎ one of several USB interfaces can connected directly to USB peripheral for data output.
◎ has a PCI expansion slot which can be used with other PC peripherals

Breakthrough technology

◎real-time filtering: choose one of a variety of digital filters provided by the unique real-time digital filtering to apply independently in each input channel of data acquisition process. These filters include low pass, high pass, band pass and band-stop filter with selectable filter algorithms and settings.

Selecting the resolution according to the need

◎Another unique innovation is that users can choose the data resolution. According to NTI's unique resolution of the selector, the right is leaved to the customer, where the customer can select the

resolution as they want.

Superior data capture

◎ Superior data capture functions: Provide a wealth of triggering options, including pulse, region, window, frequency and period, but also with flexible pre-trigger and post-trigger options.
◎ also provides a standard label and voice annotation channel function; index locator can be applied in the log file. After data acquisition, the system can quickly find the each location of the label in the record.
◎ Double sampling rate can make NTI series products to record and capture events in two different sampling frequencies. This feature is very useful. Only capture the required data can greatly reduce the file size.

High-precision signal conditioning

◎ NTI series products offers a variety of high-precision modular signal conditioning, including high-voltage isolation and accelerometer module, bridge module, high-speed transient module, thermocouple module and universal module. Each module can be completely automatic identification, no additional software installation or configuration is needed.
◎ 32-bit processing capability of frequency domain analysis for real-time signal: such as FFT and signal analysis between channels.
◎ 24-bit resolution for large dynamic range: for example, the characterization of associated large dynamic range of the measurement of vibration and noise is essential.

Powerful on-site report generation and data output

◎ Data archiving, retrieval
◎ Software can also be used to off-line viewing, analysis and reporting:
◎ The software provides many common computing functions such as RMS, signal cycle or energy.
◎ Data analysis functions from basic arithmetic to frequency analysis are provided.