VTS Series dynamic signal analysis system

Features

◎ **Input Channels: 2,4,8,16,32-channel synchronous inputs, expandable to 1024 channels**
◎ **1-8 channels output channels**
◎ **filter: each channel independent of the analog anti-aliasing filter and digital filter 160dB/OCT**
◎ **sampling frequency of up to 204.8kHz**
◎ **dynamic range up to 130dB**
◎ **DC accuracy: 0.3% F.S.**
◎ **Signal to Noise Ratio: ≥ 100dB**
◎ **Internal Cache: 64MB**
◎ **DSP built-in chips, to ensure real-time**
◎ **powerful source**
◎ **Built-in ICP sensor constant current source**
◎ **Optional strain, capacitance, displacement, speed and temperature conditioning module**
◎ **based on Windows, Microsoft Word automatically generated test report**
◎ **High speed USB2.0 interface**
◎ **Wireless (10 kilometers) to transfer data function**
◎ **Anti-static and functional design of intrinsically safe**

Function

◎ **real-time signal acquisition and analysis**
◎ **off-line analysis of data recording and playback**
◎ **shock / drop measurement analysis and SRS analysis**
◎ **modal data acquisition and analysis**
◎ **acoustic analysis**
◎ **rotating machinery analysis and order tracking**
◎ **multi-plane field balancing test analysis**

Applications

◎ **vehicle industry**
◎ **aerospace**
◎ **machinery and equipment manufacturing industry**
◎ **civil engineering and construction industry**
◎ **Measurement and Verification**
◎ **Packaging and Transportation**
◎ **General Test**

Chassis Type	Portable equipment-CAT Series	Hand-held instruments-SPARROW series
Number of input channels	4/8/16，Parallel sampling	2~16，Parallel sampling
Output channels	2-8	1-8
Sample rate (SPS)	0-204.8K	0-204.8K
Resolution (BIT)	24	24
Communication interface	USB	USB
Installation and multi-channel expansion mode	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	Using high-performance embedded processor with touch screen, do not connect the host computer, it achieves acquisition and control, waveform display, data analysis and other functions; high-precision, wide dynamic range for accurate measurement of weak signals; USB interface, Plug and Play use, easy to connect with the host computer, to achieve more complex data processing and analysis algorithms and other advanced features; ultra-compact design, can be hand-held; with simultaneous expansion interface, can be composite to be a simultaneous multi-channel test system. with same devices
Graph		

Chassis Type	Rackmount Chassis or stand-alone chassis-LION Series	IPC -TIGER Series
Number of input channels	2~128channels, Parallel sampling	2~64chanels, Parallel sampling
Output channels	1-8	1-8
Sample rate (SPS)	0-204.8K	0-204.8K
Resolution (BIT)	24	24
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	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; 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	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

	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;	through the LAN interface of the IPC.
Graph		

VTS-ANA-10 the basic package of structural analysis

VTS-ANA-10 the basic package of structural analysis contains commonly analytical functions: of the spectrum analyzer: data acquisition, spectral analysis (linear spectrum, power spectrum,), frequency response function FRF, the autocorrelation / cross-correlation analysis, cepstrum analysis , the probability distribution and probability density function. The original time signal can be recorded simultaneously and continuously while a variety of analysis is conducted.
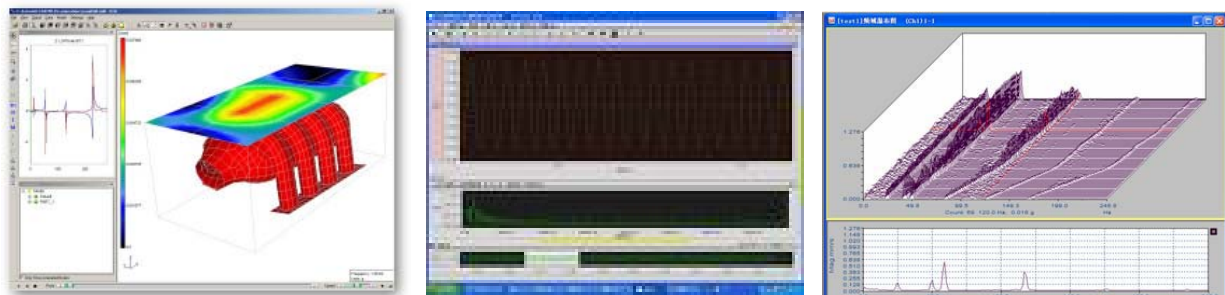
Analysis of the frequency limit: 1000,2000,5000,10 k, 20kHz

◎ **Resolution**

Line number: 8,15,30,60,125,500,1000, ..., 3200,6400,12800,25600

◎ **window function**

◎ **triggering**

◎ **Waterfall Analysis**

◎ **data pre-processing:**

Re-sampling, digital filtering, fitting, to the trend, smooth, correct, modify, intercept, delete, integral and differential to zero;

◎ **graphically:**

Ordinary curves, bar graphs, track, waterfall, trends, Lissajous diagram; cursor: single cursor, double cursor, the cursor more, peak hold, etc.;

◎ **continuous record**

◎ **log files**

◎ **post-processing**

Statistical analysis, time domain analysis, frequency domain analysis, FFT analysis (amplitude-frequency, relative frequency), cepstrum analysis, the amplitude domain analysis, data format conversion

◎ **excitation signal (optional)**

Sine, swept sine, random, pseudo-random, burst random, fast sweep, half sine, pulse, disk file