

# Controller

## Vibstar Vibration Controller

Vibstar vibration controller uses the United States TI's high performance floating -point DSP processor, with low-noise analog technology, achieves high performance and high reliability. It has Chinese and English interface.

### Technical Characteristics

- Network communication interface, convenient remote monitoring.
- ALL-IN-ONE input interface, innovative and adapt to a variety of sensor input.
- The safety output protection circuit to protect the safety of the test piece and the test system.
- The user-friendly software operation interface, easy to learn and use.
- Excellent control performance and control accuracy, random maximum number of lines 3200 lines, the swept sine lowest 1Hz.
- Automatically or manually generate WORD statements.
- And DF-amplifier on-line control.



### Ten functions

- Random
- Sine
- Classic shock
- RSTD
- Sine on Random
- Random on Random
- Sine on Random on Random
- Shock Response Spectrum
- Road Spectrum Simulation
- Transient shock

**8**Synchronization  
input channels**2**

Output channels

## Technical Specifications

### Input

|                                  |  |
|----------------------------------|--|
| Number of input channels         | 8 synchronous input channel  |
| Input impedance                  | >110 k   |
| Maximum voltage input rang       | ±10 V  |
| Maximum charge input range       | ±10000 PC  |
| Signal-to-noise ratio            | >100 dB  |
| Analog / digital converter (ADC) | 24 bit resolution  |
| Dynamic range                    | 114 dB Max. sampling frequency 192 KHz                                 |
| Input interface                  | Optional of voltage,ICP and charge                                     |
| Circuit characteristics          | The input interface with built-in ICP flow source and charge amplifier |

Have two 10 v / 1 v range and an optional AC/DC coupling. Simulation of anti aliasing filter.

### Output

|                                  |   |
|----------------------------------|---|
| Number of output channels        | 1 output channel,1 COLA output                            |
| Type of output signal            | Voltage signal  |
| Maximum output voltage range     | ±10 V   |
| Output impedance                 | < 30 Ω  |
| Amplitude accuracy               | 2 mV  |
| Digital / analog converter (DAC) | 24 bit resolution   |
| Dynamic range                    | 120 dB Max. sampling frequency 192 KHz                    |
| Circuit characteristics          | Simulation anti-aliasing filter;output protection circuit |

### Random Performance Indicators

|                  |   |
|------------------|---|
| Dynamic range    | 90 dB   |
| Control accuracy | ±1 dB   |
| Closed-loop time | 100 m/S   |
| Frequency range  | DC~4800 Hz  |
| Resolution       | ≤3200 line  |
| Control strategy | Single channel,multi-channel weighted average,multi-channel maximum,multi-channel minimum |

### Sine Performance Indicators

|                       |   |
|-----------------------|---|
| Dynamic range         | 95 dB   |
| Closed-loop time      | 10 m/S  |
| Waveform distortion   | <0.3%   |
| Signal-to-noise ratio | Bigger than 100 dB  |
| Frequency resolution  | 0.01%   |
| Sweep frequency mode  | Fix frequency,linear and logarithmic  |
| Sweep frequency speed | Linear sweep 0~6000 Hz/min<br>Logarithmic sweep 0~100 Oct/min                             |
| Frequency range       | 1 Hz~5000 Hz  |
| Control strategy      | Single channel,multi-channel weighted average,multi-channel maximum,multi-channel minimum |