

VENZO 820 Shaker Control System



State-of-the-art Hardware

- 1~2 Analog input channels
- 1 Drive Channel
- 450MHz DSP Processing
- 100 Mbps Ethernet port connecting to PC
- 30~70°C Working Temperature
- No-fans structure to reduce the background noise
- 160 dB / Octave Anti-aliasing Filter
- 24-bit ADC/DAC, 135 dB dynamic range
- 204.8 kHz Sampling Rate, 80kHz Frequency Range
- 1GB Internal Flash Memory Stores Test Configuration
- Floating Ground Design Reduces Ground Loop Problems

Classical Control Functions

- Random
- Sine
- Resonance Search and Tracked Dwell
- Classical Shock
- Multivariable Control

Analysis Capabilities and Auxiliary Functions

- THD Detection
- Data Recorder
- FFT Analysis
- SRS Analysis
- FRF
- Waterfall View
- Signal Calculation
- Signal Cache
- Signal Editor
- Word/PDF Test Report

Hardware Specifications

- Input:** 1~2 channels
- Input Interface:** BNC Connector
- Input Resolution:** 24-bit ADC
- Coupling:** AC Gnd, AC Dif, DC Gnd, DC Dif, Charge, IEPE
- TEDS:** IEEE 1451.4 compliant, automatic-reading
- Anti-aliasing Filter:** analog and digital anti-aliasing low-pass filters
- Input Dynamic Range:** 135 dB
- SNR:** > 100 dB
- Input Voltage Ranges:** ± 10 , ± 1 or $\pm 0.1 V_{PEAK}$
- Input Impedance:** 1 M Ω (Single-ended) 2 M Ω (differential)
- Input Protection Voltage:** $\pm 36 V_{PEAK}$ without damage
- Input Channel Crosstalk:** <-100 dB@1kHz
- Amplitude Channel Match:** ± 0.05 dB, up to 20 kHz
- Channel Phase Match:** better than ± 0.5 degree, up to 20 kHz
- Input Signal Type:** Charge, Voltage, High-integrated
- Total Harmonic Distortion:** <-100dB @ 1kHz

- Output:** 1 Drive Channels
- Output Interface:** BNC Connector
- Output Resolution:** 24-bit DAC
- Frequency Range:** 25.6 kHz
- Dynamic Range:** ≥ 108 dB
- Output Voltage Range:** $\pm 10V_{pk}$
- Max Output Current:** 20 mA
- Total Harmonic Distortion:** <-100 dB @ 1 kHz
- Anti-aliasing Filter:** 160 dB/Oct digital and analog filters
- PC Configuration:** Windows XP/Vista/ 7 /8 OS and an Ethernet port. Microsoft Word / Excel and PDF are recommended.

Email Report
Off-line Viewer
Transient Capture, Force/Deflection Analysis,
Shock Response Analysis
Playback Analysis



Main Classis

Dimension (mm): 290*210*60 (VENZO 820)

Weight: 2.6 kg (VENZO 820)

Front Panel: three LED lights indicate the status of "Power", "Ready" and "Control". The red Abort button is for emergency stop of the vibration test system.

Rear Panel: connectors include 2 Analog Input Channels, a Drive Channel, a 100 BASE-T Network Port, a grounding-end, an External Emergency Abort

Working Temperature: -30~70°C

Humidity: 5%~95% RH

Consumption: 10W (VENZO 820)

Power: 90~280VAC (50~60Hz)

Enclosure Rating: IP42 (for CE Marking)

PC Connection: high-speed standard Ethernet interface

Anti-vibration Performance: 10-60 Hz @ 0.15 mm peak; 60-150 Hz @ 2 gn, conform to IEC 68-2-6; 5~55 Hz~5Hz @ 0.19 mm peak, conform to GB/T6587-2012 standard II

Anti-impact Performance: Half sine 10 gn for 16 ms, conform to IEC-60068-2-27; Half sine 30 gn for 11 ms, conform to GB/T 6587-2012 standard II

EMC Standards: EN 55022:2010, EN55024:2010, EN 60950-1:2006+A12:2011

Safety: EN 61010-13rd

Compliance: CE Marking