StrataVisor NZXP
Exploration Seismograph

GEOMETRICS
Simplify your search

For those practitioners who prefer not to use laptops in the field, the feature-packed StrataVisor NZXP is an "all-in-one" seismograph housed in a compact, weatherproof and shockproof chassis. In addition to a built-in PC, it includes a brilliant daylight-visible color screen, waterproof keypad and built-in printer.

The StrataVisor NZXP is ideal for those practitioners who prefer the suitcase-style form factor for smaller surveys but wish to maintain Geode-like flexibility and performance. The NZXP comes with our MGOS acquisition package, which includes all of the necessary tools to conduct refraction, reflection, and surface wave surveys, including CDP roll-along, real-time correlation, and auto-triggering. Optional packages for marine surveying, continuous recording, GPS synchronization, and seismic surveillance are available.

Containing up to 64 channels internally, the StrataVisor can be seamlessly expanded by adding Geode modules. And when we say seamlessly, we mean it: just plug in the Geodes and turn on the StrataVisor; configuration is automatic.

The StrataVisor comes with a 3-year limited warranty backed by Geometrics, now in our 48th year of providing prompt, knowledgeable customer support. Geodes are available for rent to quickly expand your system to accommodate any survey situation.

FEATURES & BENEFITS

- **Built-in printer, screen, and keypad** - Less equipment to keep track of in the field.
- **Water and dust resistant; rain-proof when vertical** - Use anywhere, anytime.
- **Rugged and compact** - Fits in an overhead bin on most airplanes.
- **Built-in thermal printer** - Print your data right in the field.
- **Geophone and line testing** - No need for time-consuming tap test.
- **Built-in military grade CPU** - No laptop necessary.
- **Plug-and-play expandability using Geodes** - Easily build a large-channel reflection system when needed.
- **Feature set identical to Geode** - Use for any kind of survey, including large-channel reflection.

SPECIFICATIONS | StrataVisor NZXP Exploration Seismograph

Configurations: 8, 12, 16, 24, 48, or 64 per unit. Expandable with addition of Geode modules.

Operating System: Windows XP.

A/D Conversion: 24-bit result using Crystal Semiconductor sigma-delta converters and Geometrics proprietary over-sampling.

Dynamic Range: 144 dB (system), 110 dB (instantaneous, measured) at 2 ms, 24 dB.

Distortion: 0.0005% @ 2 ms, 1.75 to 208 Hz.

Bandwidth: 1.75 Hz to 20 kHz. 0.6 and DC low frequency option available.

Common Mode Rejection: > 100 dB at <= 100 Hz, 36 dB.

Crosstalk: -125 dB at 23.5 Hz, 24 dB, 2 ms.

Noise Floor: 0.20 µV, RFI at 2 ms, 36 dB, 1.75 to 208 Hz.

Stacking Trigger Accuracy: 1/32 of sample interval.

Maximum Input Signal: 2.8 V PP, 0 dB.

Input Impedance: 20 kOhm, 0.02 µf.

Preamplifier Gains: Standard factory configuration is 24 and 36 dB. Optional configurations include 12 and 24 dB or 0 dB.

Anti-alias Filters: -3 dB at 83% of Nyquist frequency.

Acquisition and Display Filters:

- **Low Cut:** OUT, 10, 15, 25, 35, 50, 70, 100, 140, 200, 280, or 400 Hz, 24 or 48 dB/octave, Butterworth.
- **Notch:** OUT, 50, 60, 150, or 180 Hz, with the 50 dB rejection band width 2% of center frequency.
- **High Cut:** OUT, 32, 64, 125, 250, 500 or 1000 Hz, 24 or 48 dB/octave.

Sample Interval: 0.02, 0.03125, 0.0625, 0.125, 0.25, 0.5, 1.0, 2.0, 4.0, 8.0, 16.0 ms.

Correlation: High-speed hardware correlator for fast cycle time with vibrators and pseudo-random sources. Correlates 16K record, unlimited channels in under 1second.

Record Length: 16,384 samples standard, 65,536 samples optional.

Pre-trigger Data: Up to full record length.

Delay: Full record length to +100 sec.

Event Trigger: Based on seismic event; criteria set by user.

Continuous Recording (optional): Record GPS-synchronized, gapless data in SEG-2 format.

Auxiliary Channels: All StrataVisor channels can be programmed as either AUX or DATA. Optional AUX channel input available.

Roll-along: Built-in, no external roll box required.

Geophone Testing: Pulse test measures resistance, sensitivity, natural frequency, and damping.

Instrument Tests: Optional analog testing available. Measure noise, crosstalk, CMR, dynamic range, gain similarity and trigger accuracy. Additional built-in oscillator required.

Data Formats: SEG-2, SEG-D and SEG-Y standard.

System Software: Basic operating software includes full compliment of acquisition, display, plotting, filtering and storage features. Numerous optional features available; see SCS data sheet.

Bundled Applications Software: SeisImager/2D Lite refraction analysis software from OYO.

Data Storage: 80 GB or better hard drive.

Plotter: 4-inch wide, thermal.

Triggering: Positive/negative TTL or contact closure, software adjustable threshold. STA/LTA-like algorithm for triggering on seismic waveform.

Power: Requires 12V external battery. Uses 30W plus 0.5W/channel during acquisition. Standby mode reduces power consumption by 70%.

Environmental: Boots from 0ºC to +40ºC (+32ºF to +104ºF). Operates from –10ºC to +40ºC (+14ºF to +104ºF). Extended temperature version available to +60ºC (+140ºF). Operates in a light rain, water-resistant with cover closed. Passes MIL810E/F vibration test.

Physical: L: 26.7 cm; W: 34 cm; H: 33 cm; Weight: 18 kg (10.5x18x21 in; 38 lb).

Warranty: Three years on acquisition boards, two years on all other parts. Extended warranty available.

Optional Built-In Test Functions

Instrument:		Geophone:
• Noise	• Distortion	• Natural Frequency
• DC Offset	• Crossfeed	• Resistance
• Gain Accuracy	• CMR	• Damping
• Gain and Phase Similarity	• Bandwidth	• Sensitivity
	• Timing Accuracy	

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