



DISTRIBUTOR:



Environmental Systems & Services
 8 River Street Richmond
 VIC 3121 Australia
 T + 61 3 8420 8999
 F + 61 3 8420 8900
 geotechnical@esands.com
www.esands.com

Available Models

- Combined system
 Mod.16SG24-N (electrical imaging+24 channel seismograph)
- Seismograph Mod.16S24-N (24 channels)
- Electrical Imaging
 Mod.16G-N
- 12-channel seismics version available on request

Available accessories

3D Borehole Geophone
 Vertical and horizontal geophones

Seismic cables and accessories

Accessories for VES soundings with 4 electrodes

Software for seismic refraction, reflection, MASW, downhole, electrical imaging

Combined system for seismics & electrical imaging Series 16SG24-N



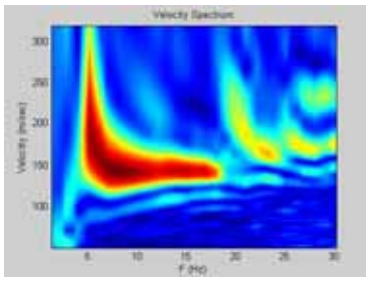
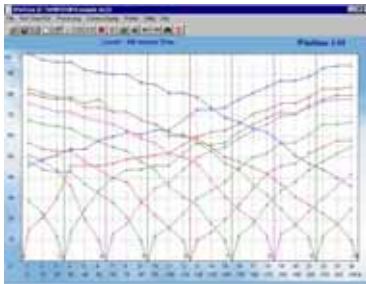
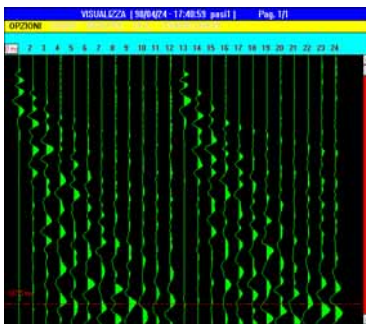
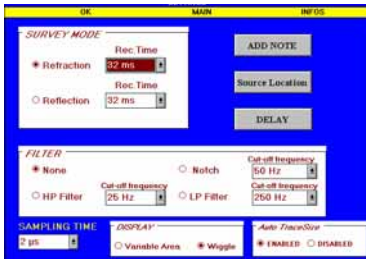
New features & functions:

- innovative design
- new National Instruments® acquisition boards
- LCD touch screen 10.6"
- Via Eden processor up to 1GHz
- smaller and lighter (48x38x18cm, 11 kg)
- 32 bit operating system and software
- USB port for data transfer and connections
- network board for remote diagnosis
- 60 Gb HD
- reduced power consumption
- sampling time from 32 microsec to 2 millisecc for all 24 channels
- record length increased up to 65536 millisecc
- an ideal solution also for MASW, microtremors and downhole investigations



Combined system 16SG Series

What makes this system really unique is its extreme versatility. Our design philosophy for this realization was in fact characterized by the need to create a system which would not only guarantee important performances and make it easy to use, but which would really be of multipurpose type. The possibility to manage the two different investigation methods – refraction/reflection seismics as well as electrical imaging – through a high-level software and a hardware characterized by extraordinary performance features, has allowed the realization of a combined modular instrument, which may grow in successive steps, finally offering the opportunity to complete your system base as to your real needs.



AVAILABLE MODELS

Model	Code	Bit	Seismic channels	Electrical imaging
16SG24-N	SIS-201-000	24*	24	YES
16SG12-N (on request)	SIS-200-000	24*	12	YES

POSSIBLE UPGRADES

From Model	To Model	Bit	Seismic channels	Electrical imaging
16S24-N	16SG24-N	24*	-	+
16G-N	16SG24-N	24*	+24	-

*with oversampling and postprocessing

Main functions

- seismograph

- Filter Activation: in acquisition or post-acquisition
- Antialiasing filters: active, LPF, 8th in Butterworth order; attenuation -48dB/oct (-160dB/dec); $f_0=5/8$ fnyq; accuracy. $\pm 1\%$ cutting frequency
- Enhancement with/without total/partial preview
- Geophone polarity inversion
- Marker for the determination of the video points position on the time scale; possibility to save the first arrivals on file for data download to PC
- A.G.C. Automatic Gain Control
- Delay: Pre-trigger 0-10ms (step of 1ms); Post-trigger 0-16000ms (step of 1ms)
- Display in wiggle-trace or variable area
- Noise-monitor with "real time" cascade display
- Automatic or manual trace-size for each channel
- Automatic recording of acquisition
- Data download to PC via USB
- Automatic calibrations
- Data codification in SEG-2 format

- electrical imaging:

- Possibility to record acquisition on internal HD
- Automatically managed gains in autoranging mode
- Automatic cleaning of self potentials
- Automatic calibrations: double offset calibration, input calibration on reference voltages, gain calibration
- Automatic test procedures for the Link.Box operating ability, the correct connection of electrodes and diagnostics.
- Management of energizer and polarization reversal from the central processing unit
- Design of energetic wave
- Display of GTDT (Ground Time Domain Test) for a correct programming of wave
- COUPLING function for the check of spreading electrodes
- ROLL-ALONG for the realization of continuous profiles with a minimum of 32 electrodes
- Linear and logarithmic PSEUDOSECTION