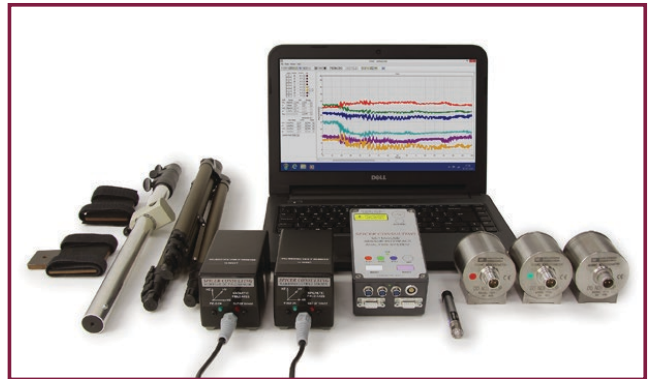


SPICER SC11

DESCRIPTION

The Spicer SC11 Survey System is an easy-to-use site survey software/hardware package from Spicer Consulting. With a configurable sensor package, the SC11 can collect data with up to two magnetic field sensors, three seismic accelerometers, and a precision microphone. It features data acquisition and pre-processing by an embedded microcomputer in the sensor interface for enhanced performance. The data interface to the computer is through an industry-standard USB connection for use with most modern laptops running Microsoft Windows.

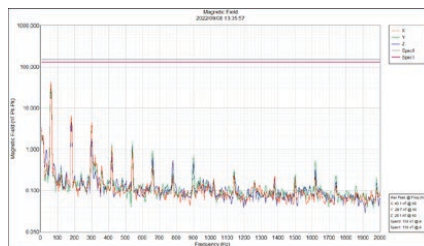


KEY FEATURES

- Ability to configure and automatic surveys based on your testing and instrument requirements
- Capable of measuring magnetic fields at two heights simultaneously, floor vibrations in three axes, and acoustic levels depending on sensor selection
- SC11 Survey 5.6 software automates multiple unattended site surveys
- Templates and a step-by-step guide aid novice users in performing site surveys
- Predefined setup scripts run the spectrum analyzer, chart recorder, oscilloscope, and plot results



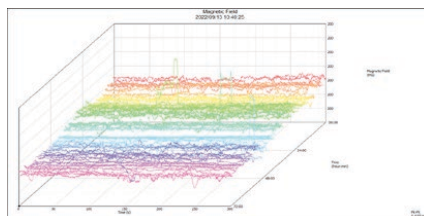
SAMPLE OUTPUT DATA FROM THE SC11



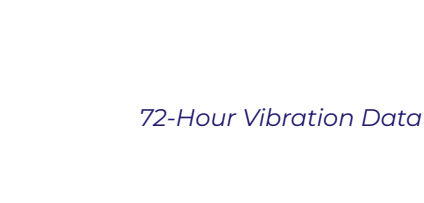
Magnetic Field Frequency Domain



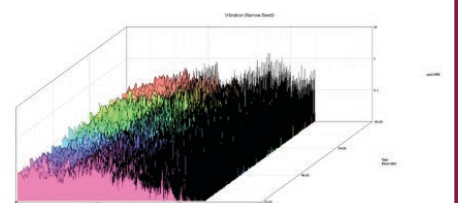
DC Magnetic Field Time Domain



72-Hour Magnetic Field Data



72-Hour Vibration Data



SPICER CONSULTING

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SPICER SC11

SPECIFICATIONS

System	
Carrying Case Size	55 x 46 x 23 cm approx. (21.5 x 18 x 8.5 in approx.)
Weight	15 kg (32 lb) approx. including typical laptop
Sensor Interface: SC11/SI/USB	
Inputs	
MAG1, MAG2	3-Axis Magnetic Field Sensor (2 x SC24 Sensor)
VIB1, VIB2, VIB3	3-Axis vibration (3 x Wilcoxon 731A)
MIC	Microphone (B&K 4190/2669L)
AUX	BNC voltage input, DC coupled, ± 10 V range 100 k Ω impedance
Anti-Aliasing Filters	20kHz
Power	100-240V AC, 50-60 Hz, 0.25A max
3-Axis Magnetic Field Sensor: SC24/DC+AC	
Coordinate System	X, Y, Z Rectangular Cartesian
Bandwidth	DC – 13 kHz (-3 db)
Ambient Field Range	$\pm 2,000$ mG (± 200 μ T)
Measurement Range	± 20 mG (± 2 μ T)
Warm-Up Drift	± 0.1 mG (± 10 nT) in 2 hours (typ) ± 0.25 mG (± 50 nT) in 2 hours (max)
Long-Term Drift	± 20 μ G (± 2 nT) in 24 hours
Noise Level	7 μ G (0.7 nT) RMS (0-10kHz)
Accuracy	± 1 % (after >2 hour warm-up) (± 5 % cold)
Vibration Sensor: Wilcoxon 731A Accelerometer	
Type	Wilcoxon Research, model 731A
Bandwidth	0.1 – 500 Hz
Measurement Range	2 m/s ² (0.2 g's ^a) Pk-Pk (in this system)
Noise Limit	7 μ m/s ² RMS max. 0.35 μ m/s RMS at 1Hz, 0.11 μ m/s RMS at 5Hz 0.07 μ m RMS at 1Hz, 0.0035 μ m RMS at 5Hz
Accuracy	± 5 % (with gain calibration file)
Acoustic Sensor: B&K 4190/2669L Microphone	
Type	Brüel & Kjær, Condenser Microphone 4190, Pre-Amplifier 2669L
Bandwidth	1.5 Hz – 20 kHz
Measurement Range	110 dB (in this system)
Noise Limit	20 dB (in this system)
Accuracy	± 1 dB 3 Hz – 20 kHz

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