

# SSU 3000LC

The SSU 3000LC is a convenient, easy to use and complete vibration and sound monitoring system designed with the user in mind. Key features include an enhanced tactile keypad, heavy-duty twist-lock metal cable connectors and a heavy-gauge aluminum enclosure with baked enamel finish. The four-line by 20-character LCD and menu-driven programming makes on-site setup easy and permits the user to view numerical waveform data and monitoring results in the field. The timesaving template utility can store repetitive setup information for quickly deployed instruments with pre-defined configurations. The internal lead-acid battery is long lasting and easily charged using the included AC adapter. An integrated timer turns the unit on and off at pre-selected times to conserve battery power. The 2-hertz, high-pass microphone and all other accessories fit easily into the tough, structural-resin carrying case.

The SSU 3000LC has three recording modes: 1) triggered – either seismic or sound, 2) continuous (histogram) and 3) sustained trigger. The internal memory can store up to 220, 1-second events. Sustained trigger mode delays processing and permits collection of consecutive 15-second intervals of waveform data up to a cumulative total of approximately 4.2 minutes. Data can be collected in either imperial (US customary) or metric units. The included basic compliance software package can be used for data analysis and preparation of standard or customized reports.

GeoSonics® is a leader in seismograph innovation, design, manufacturing and vibration consulting. Because we use the equipment we design, a user-friendly interface, ruggedness and reliability are not just goals – they are standards.

*GeoSonics® ...always a step ahead!*

## Features & Specifications



Easily accessible serial ports for external communications. LEDs show data transmittal status. External power supply port. In-line fuse for internal circuitry protection.



Instrument connection ports come standard with caps to protect connecting pins when not in use.



Heavy-duty twist-lock metal cable connections are standard design features on all GeoSonics® seismographs.

### STANDARD FEATURES:

- External geophone meets ISEE density recommendations.
- Four-line by 20-character LCD and 16-key alphanumeric keypad for on-site setup and data display.
- Heavy-gauge aluminum case & baked enamel finish.
- Heavy-duty twist-lock metal cable connectors.
- Internal, rechargeable lead acid batteries.
- External LED indicators for charging & recording status.
- Flexible interface for custom configurations.
- Two (2) independent threshold alarm output ports.

### GENERAL:

- Weight (With Case)..... 14.7 lbs (6.7 kg)
- Dimensions (With Case) ..... 12.3 in x 13.5 in x 5.0 in (31.1 cm x 34.3 cm x 12.7 cm)
- Weight (Without Case)..... 4.5 lbs (2.1 kg)
- Dimensions (Without Case) ..... 8.7 in x 7.0 in x 3.6 in (22.1 cm x 17.8 cm x 9.2 cm)
- Operating Temperature: 0 to 130° F (-18 to 54° C).
- One (1) year warranty on parts and labor.

### RECORDING MODES:

#### Seismic Trigger:

Resolution: 0.0025 in/sec. (0.06 mm/sec.).  
 Range: Up to 5.120 in/sec. (130 mm/sec.)(other ranges available).  
 Frequency Response Range: 2 to 250 Hz (3 dB) / 2 to 1,000 Hz (Nyquist).  
 Sampling Rate: Up to 2,000 / second / channel.  
 Recording Intervals: 1 to 15 seconds.

#### Sound Trigger:

Accuracy: 5% within one year (multi-frequency calibrated).  
 Calibration: Internal dynamic.  
 Range (Linear): 78 to 142 dB (other ranges available).  
 Frequency Range (3 dB): 2 to 250 Hz (3 dB) / 2 to 1,000 Hz (Nyquist).  
 Accuracy: ±10% or 1dB within one year (multi-frequency calibrated).  
 Calibration: Internal electronic.

#### Continuous (Histogram):

Vibration Data: Peak particle velocity and frequency for L, T & V.

#### Sustained Trigger:

Recording Intervals: Selectable: 1 to 60 seconds.  
 Sound Data (Linear): 78 to 142 dB (other ranges available).  
 Multiple Event Recordings: Consecutive waveform recordings up to 4.2 minutes.

### STANDARD FEATURES (Continued):

- PC serial port interface for downloading events data.
- Up to 220, 1-second waveform data recordings (up to 50, 5-second waveform data recordings).
- GPS acquisition feature (NEMA 108 compatible).
- Six (6) template locations for recurring set up data.
- Imperial and metric operation.
- Basic compliance reporting software package included.
- Designed & manufactured in the USA.

### OPTIONAL ACCESSORIES:

- Hydrophones (instrument modifications required).
- Accelerometers to 50 g's or higher (instrument modifications required).
- Amplifiers (10x-100x).
- Optically isolated dual alarm control for dialers, pagers and remote alarm notifications.
- Advanced seismic analysis software package.
- Extended warranties & service contracts.
- Numerous custom configurations – call for details.