



Trig-Tek™ 61R Vibration Monitor

The Trig-Tek™ 61R Portable Vibration Monitor is intended for use in situations where a portable instrument is convenient or required.

Key Features

- 3 Hz to 20 kHz frequency range
- 10, 100, or 1000 g FS
- Sensor detection
- Overload detection

Product Information

The Trig-Tek™ 61R will indicate acceleration using the input from an accelerometer. The 61R is supplied with a charger pack that operates from 115 VAC line to recharge the battery.

The 61R is designed to operate with a sensor that has sensitivity of “5” or “10” mV/g with the current or sensitivity of “1” or “10” mV/g without the current. It has Full Scale (FS) ranges of “10,” “100,” or “1000” g RMS acceleration.

It has sensor “Open” or “Short” LED indicators, and also an “Overload” LED. The “Batt Lo” LED alerts the operator when the battery needs recharging.

A filter switch selects a “2,” “5,” “10,” or “20” position to provide selectable High-Pass and Low-Pass filtering. These are nominally as listed:

- Position 2: 3 Hz HP, 2 kHz LP
- Position 5: 3 Hz HP, 5000 Hz LP
- Position 10: 3 Hz HP, 10,000 Hz LP
- Position 20: 3 Hz HP, 20,000 Hz LP

Special cutoffs can be set on special orders.

Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

Acceleration Input

Impedance

- 100 k or greater

Sensitivity

- Current On: 5 or 10 mV/g
- Current Off: 1 or 10 mV/g

Max Input

- 1000 g

Accuracy

Acceleration (at 100 Hz REF)

- 10, 100, or 1000 range $\pm 1\%$

Frequency Response (from REF)

- Acceleration 3 Hz to 20 kHz $\pm 3\%$; output is 3 dB down at selected filter cutoff

Current

- 3.5 ± 1 mA

Connector

- BNC

AC Output

Impedance

- $< 100 \Omega$

Sensitivity

- $5 V_{rms}$ for FS

Frequency Response

- 3 Hz to 20 kHz

Connector

- BNC

Interface

Power

- 6 V batteries: Nominally 8-hr operation before charging

Controls

Meter Sensor mV/g

- The 4-position power switch selects "5" or "10" mV/g with the current on or "1" or "10" mV/g with the current off

Meter FS Power Switch

- Selects "10," "100," "1000" FS range, or "Power Off"

Filter Switch (3 dB cutoff 10%)

- Switch positions:
Position 2: 3 Hz HP, 2 kHz LP
Position 5: 3 Hz HP, 5000 Hz LP
Position 10: 3 Hz HP, 10,000 Hz LP
Position 20: 3 Hz HP, 20,000 Hz LP

Indicators

Vibration Meter

- 3.5 digit DVM with LCD displays

Sensor Open LED

- This LED will illuminate if the sensor is open

Sensor Short LED

- This LED will illuminate if the input sensor has shorted

Batt Lo LED

- Illuminates when battery needs to be charged

OL LED

- The LED will illuminate if the input is overloaded or any FS is exceeded

Note: For best battery life, the battery should be completely discharged before charging

Mechanical

Dimensions

- 6" W x 7" H x 2½" D
(15.2 cm x 17.8 cm x 6.3 cm)
(including knobs and connectors)

Ordering Information

408322-001 : Trig-Tek™ 61R

Vibration Monitor

