Model 45EMD
PORTABLE CALIBRATOR

- **Laboratory Accuracy**
- **2.0 to 9999 Hz**
- **0.1 to 9999 mV or pC**
- **Differential pC Output**
- **Squarewave Output**
- **Adjustable DC Offset**

The Trig-Tek, Inc. Model 45 EMD Portable Calibrator is designed to provide precision signals for field calibration of measurement instrumentation. This hand held unit generates the required outputs to simulate a variety of transducers including: temperature, pressure and vibration, with laboratory accuracy. It is powered by a rechargeable NICAD battery and will operate for up to 8 continuous hours on a single charge. The 45 EMD's output frequency is crystal controlled and accurate to .05%. Frequency is selectable from 2.0 to 999.9 Hz with 0.1 Hz resolution or 20 to 9999 Hz with 1.0 Hz resolution. A four digit thumbswitch and a X1 or X10 switch allow amplitudes to be set from 0.1 to 999.9 in mV or pC (picocoulombs) with a 0.1 resolution or from 1.0 to 9999 in either mV or pC with 1.0 resolution. Selectable output units include DC, PEAK, PEAK-PEAK and RMS. Single ended mV and pC signals are output via front panel BNC connectors. A differential pC output is provided via a three pin connector. A DC offset voltage with selectable polarity can be superimposed on the AC outputs. Convenient switches allow selecting polarity and setting from 0 to 1.5 or 0 to 15 VDC. A constant 5 volt squarewave output is provided at set frequency to be used as a synchronous or reference signal. The 45 EMD includes a carrying case.

Specifications

Frequency

Range ..... 2.0 to 9999 in two ranges
Accuracy ..... ± .05%
Resolution ..... 0.1 Hz X1 range 2.0 - 999.9 Hz
1.0 Hz X10 range 20 - 9999 Hz

Amplitude

Impedance ..... mV (millivolts) less than 50 Ohms
pC (picocoulombs) 1000 pF cap.

Accuracy ..... 10 to 9999 Hz 0.5% of reading
± 3 LSB (for set outputs).
Squarewave 5.5 Volt p-p.

Distortion ..... Less than 1% from 20 to 9999 Hz.

Squarewave Output .... 5 Volt constant @ set frequency

DC Offset Positive or Negitive
X1 ..... 0 to 1.5 VDC
X10 ..... 0 to 15 VDC

Power ..... 120 or 230V Battery charger
9V at 200 mA output.

Dimensions ..... 4.75” W x 6.5” H x 2” D.

Specifications are subject to change without notice.