# 6800

## 80,000 Count Digital Multimeter

- 80,000 count Dual Display
- Basic DC accuracy is 0.05%
- Pulse output with frequency selection from 0.5Hz to 5KHz with duty cycles from 1% to 99%
- Measures frequency, ms Pulse width and duty cycle
- AC and AC+DC TRUE RMS measurements.
- Hi and Lo limit testing
- dBm measurement using 20 reference Impedances
- Min/Max/AVG
- Peak hold and Relative mode
- RS232 port
- CE and Category II 1000V and Cat III 600V safety standards
- Built in 10 hour timer



## 6800

## SPECIFICATIONS

## mV DC

Ranges: 80 mV, 800 mV; Best Resolution: 1  $\mu V$  Accuracy:  $\pm 0.05\%$  + 10d; Input Impedance: 1G  $\Omega$ 

## DC Volts

Ranges: 8V, 80 V, 800V, 1000V; Best Resolution: 100 $\mu$ V Accuracy:  $\pm$ (0.05% + 10d); Max. Input Voltage: 1000V DC Input Impedance: 10M $\Omega$ 

#### AC mV/Volts TRUE RMS

Ranges: 80mV, 800mV, 8V, 80V, 750V Best Resolution:  $1\mu$ V AC Volts Accuracy (80mV, 800mV, 8V ranges): 50/60Hz:  $\pm(0.5\% + 10d)$ 50Hz - 1KHz:  $\pm(1.0\% + 10d)$ 1KHz - 10KHz:  $\pm(3.0\% + 10d)$ 10KHz - 20KHz:  $\pm(5.0\% + 10d)$ AC Volts Accuracy (80V and 750V Range): 1% from 50Hz to 400Hz AC + DC V Accuracy:  $\pm(1.0\% + 10d)$  50Hz to 200Hz Max. Input Voltage: 1000 V DC or AC peak

Input Impedance:  $10M\Omega$  (1G $\Omega$  80mV and 800mV)

## DC Current

## AC True RMS Current

Ranges: 80mA, 400mA, 8A, 10A; Best Resolution:  $1.0\mu A$ Accuracy:  $\pm(0.5\% + 10d)$  50Hz to 1KHz Accuracy AC+DC Amps:  $\pm(1.0\% + 10d)$  50Hz to 200Hz Overload Protection: 800mA/250 fuse and 10A/250V fuse

#### DBM

Range: -80dBm to +80dBm; Best Resolution: -0.01dBm Accuracy: ±(1.0% or reading)

Default Ref impedance is  $600\Omega,$  Ref. Impedances from  $4\Omega$  to  $1200\Omega$  maybe selected

## Resistance

Ranges:  $800\Omega$ ,  $8K\Omega$ ,  $80K\Omega$ ,  $800K\Omega$ ,  $800K\Omega$ ,  $80M\Omega$ Best Resolution:  $10.0m\Omega$ ; Accuracy:  $\pm(0.3\% + 10d)$ Max. Input Voltage: 250V

### **Diode and Continuity Test**

Range: 8.00V; Accuracy:  $\pm(3\% + 10d)$ The Buzzer sounds when the measured resistance is  $<50\Omega$ 

#### Frequency

Ranges: 1KHz, 10KHz, 100KHz, 100KHz, 8MHz Best Resolution: 0.01Hz; Input sensitivity: 0.7V AC rms Accuracy: ±(0.05% + 5d); Max. Input Voltage: 250V Frequencies to 1Ghz can be read with optional adapter Secondary display reads: Duty cycle and mS pulse width

#### RPM

Range: 0 to 99,999; Resolution: 1RPM Accuracy:  $\pm$ (0.1% + 5d) Note: The RPM function is the secondary display of the frequency measurement and requires the RPM adapter

#### Capacitance

Ranges: 1nF, 10nF, 100nF, 1µF, 10µF, 100µF. Best Resolution: 1pF Accuracy: ±(2.5% + 10d), (±5% + 10d), 1nF range Maximum Input Volts: 250V

#### Temperature

Ranges: -50 to 1372°C (-58 to 2502°F) Thermocouple: K type Display: °C primary display °F secondary display Resolution: 0.1° Accuracy: ±(2.5% + 8d)

## Square wave Generator

Amplitude: Approx 3V Frequencies from 0.500Hz to 5.000KHz may be selected in 15 Steps Duty Cycle: Variable from 1% to 99%

## General Specifications

Operating Temperature: 0 to 50°C (32 to 122°F) Power: 9Volt battery @ 36 Hours of operation Size: 7.5" (H) x 3.54" (W) x 1.45" (D) Weight: 1.43 lbs Auto Power-Off: 30 minutes or the timer value. Accessories: Instruction manual, Test leads, Holster, Temperature probe, 9V battery, RS-232 software and cable