

### TECHNICAL DATA



### Features

- Measures AC/DC voltage and current, frequency, resistance, capacitance and temperature
- Diode check and continuity functions
- Relative and data hold functions
- Double molded plastic housing
- Cat. III 600V safety rating
- Includes Thermocouple Adapter, thermocouple wire probe (Type K), test leads, battery and carrying case

### Specifications

#### AC/DC Voltage

Range: AC: 400mV, 4, 40, 400, 600V  
DC: 400mV, 4, 40, 400, 600V

Accuracy: AC: 400mV  $\pm$ (15% rdg. + 15 dgt.)  
4V  $\pm$ (1.2% rdg. + 3 dgt.)  
40, 400V  $\pm$ (1.5% rdg. + 3 dgt.)  
600V  $\pm$ (2.0% rdg. + 4 dgt.)  
DC: 400mV  $\pm$ (0.05% rdg. + 2 dgt.)  
4, 40, 400V  $\pm$ (1.2% rdg. + 2 dgt.)  
600V  $\pm$ (1.5% rdg. + 2 dgt.)

Resolution: AC: 0.1mV, 1, 10, 100V  
DC: 0.1mV, 1, 10, 100V

#### AC/DC Current

Range: 400, 4000 $\mu$ A, 40, 400mA, 10A

Accuracy: AC: 400 $\mu$ A  $\pm$ (1.5% rdg. + 5 dgt.)  
4000 $\mu$ A/40, 400mA  $\pm$ (1.8% rdg. + 5 dgt.)  
10A  $\pm$ (3.0% rdg. + 7 dgt.)  
DC: 400 $\mu$ A  $\pm$ (1.0% rdg. + 3 dgt.)  
4000 $\mu$ A/40, 400mA  $\pm$ (1.5% rdg. + 3 dgt.)  
10A  $\pm$ (2.5% rdg. + 5 dgt.)

Resolution: 0.1, 1 $\mu$ A, 10, 100mA, 1A

#### Resistance

Range: 400 $\Omega$ , 4, 40, 400k $\Omega$ , 4, 40M $\Omega$

Accuracy: 400 $\Omega$ :  $\pm$ (1.2% rdg. + 4 dgt.)  
4k $\Omega$ :  $\pm$ (1.0% rdg. + 2 dgt.)  
40, 400k $\Omega$ , 4M $\Omega$ :  $\pm$ (1.2% rdg. + 2 dgt.)  
40M $\Omega$ :  $\pm$ (2.0% rdg. + 3 dgt.)

Resolution: 0.1 $\Omega$ , 1, 10, 100k $\Omega$ , 1, 10M $\Omega$

#### Capacitance

Range: 4, 40, 400nF, 4, 40, 200 $\mu$ F

Accuracy: 4nF:  $\pm$ (5.0% rdg. + 50 dgt.)  
40nF:  $\pm$ (5.0% rdg. + 7 dgt.)  
400nF/4, 40 $\mu$ F:  $\pm$ (3% rdg. + 5 dgt.)  
200 $\mu$ F:  $\pm$ (5% rdg. + 5 dgt.)

Resolution: 1, 10pF, 0.1, 1, 10nF, 0.1 $\mu$ F

#### Frequency

Range: 9.999, 99.99, 999.9Hz, 9.999, 99.99, 999.9KHz, 9.999MHz

Accuracy: 9.999, 99.99Hz:  $\pm$ (1.5% rdg. + 5 dgt.)  
999.9Hz, 9.999, 99.99, 999.9KHz:  $\pm$ (1.2% rdg. + 3 dgt.)  
9.999MHz:  $\pm$ (1.5% rdg. + 4 dgt.)

Resolution: 0.001, 0.01, 0.1, 1, 10, 100Hz, 1kHz

#### Temperature

Range: -4 to 1400°F (-20 to 760°C)

Accuracy:  $\pm$ (3.0% rdg. + 9°F)  
 $\pm$ (3.0% rdg. + 5°C)

Resolution: 1°F, 1°C

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#### General Specifications

Range Selection:	Autoranging/Manual
Display:	4,000 count LCD display
Display Hold:	Yes
Peak Hold:	Yes
Relative Mode:	Yes
Diode Test:	Yes
Continuity Check:	Audible signal if resistance $\leq 150\Omega$
Duty Cycle:	Yes (0.1 - 99.9%)
Kick Stand:	Yes
Auto Power Off:	Yes (after 15 minutes)
Power Supply:	9V Battery
Low Battery Indicator:	Yes
Fuse Protection:	Yes
Replaceable Test Leads:	Yes
Oversvoltage Category:	CAT. III 600V
Product Certifications:	CE
Operating Temperature:	32 to 122°F (0 to 50°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Dimensions:	5.9 x 2.8 x 1.9" (150 x 70 x 48mm)
Weight:	9oz (255g)

Model	Description
R5008	Multimeter with Temperature
R1020	Fused Test Lead Set
CP-09	AC Current Adapter
R2990	Thermocouple Adapter
TP-01	Type K Thermocouple Wire Probe
R1000	Safety Test Lead Set, Double Insulated
R2920	Surface Thermocouple Probe
R2930	Right Angle Thermocouple Surface Probe
R2950	Immersion Thermocouple Probe
CA-52A	Soft Carrying Case
R5008-NIST	Multimeter with Temperature & NIST