FEATURES

- Measures volts and ohms
- 0.1% accuracy
- 1mV or 1 ohm resolution
- Dual slope integration
- Six samples per second
- Automatic polarity
- Floating input
- High input impedance
- Integrated circuit reliability
- Optional DC current measurement
- Infinite display time
- Compact
- Low cost
- Display storage

DESCRIPTION

The Model 7050 Digital Multimeter incorporates latest design concepts with cost savings and space advantages gained by the use of integrated circuits. The result of this combination is a low cost, accurate instrument that is ideally suitable for use in production, general test and quality assurance, servicing and educational applications. The Model 7050 is rugged, easy to operate, read, and calibrate; and as such, is an ideal replacement for “old-fashioned” analog-type meters and panel indicators and for more expensive digital voltmeters. Its low cost and high performance capabilities make it an attractive choice for use in the O.E.M. market.

It utilizes the dual slope integrating technique which combines the noise rejection capabilities of integration with the accuracy and stability of automatic comparison to an internal standard. Fast response time is assured by its speed of six measurement samples per second.

The basic instrument provides both DC voltage and resistance capability. Optional precision shunt resistors extend its capability to DC current measurements.

Readout is easy to read, in-line indicators; three full decades plus fourth digit give full scale readout of 1500. This is equivalent to 50% over-ranging with no degradation of accuracy. Some of the standard features in the Model 7050 are input impedance of greater than 1000 megohms on its most sensitive range, floating input which may be operated 500 volts above ground, readout storage (non-blinking display), and remote controlled infinite display time.
SPECIFICATIONS

Functions —
DC Volts; Ohms; External Current Shunts Available

DC VOLTS —
1.500 V Full Scale (1 mV Resolution)
15.00 V Full Scale
150.0 V Full Scale
1000. V Full Scale

Input Impedance —
1.5 V Range > 1000 MΩ
15 V to 1000 V Ranges 10 MΩ

Maximum Voltage — 1000 V may be safely applied to any range without damage

Voltage Coefficient: ±0.0005%/V when input exceeds 500 volts.

RESISTANCE —
1.500 KΩ Full Scale (1 Ω Resolution)
15.00 KΩ Full Scale
150.0 KΩ Full Scale
1.500 MΩ Full Scale

Input Current —
1.5 KΩ Range 1 mA
15 KΩ Range 100 µA
150 KΩ Range 10 µA
1.500 MΩ Range 1 µA
15 MΩ Range 100 nA

ALTERNATE POWER MODELS
Line Voltage Order
220 Volt ±10% Model 7050 - 220
100 Volt ±10% Model 7050 - 100

Maximum Voltage — 125 V may be safely applied to any range without damage

Accuracy —
From 15°C to 35°C
DC Volts ±0.1% of reading, ±1 digit
K Ohms ±0.2% of reading, ±1 digit
M Ohms ±1% of reading, ±1 digit
From 0°C to 15°C and 35°C to 45°C
DC Volts ±0.3% of reading, ±2 digits
K Ohms ±0.3% of reading, ±2 digits
M Ohms ±3.0% of reading, ±2 digits

Readout —
Three digital readout indicators; One over-range digit; Decimal point indicators; Plus and minus polarity indicators; Display storage (non-blinking)

Power —
115 VAC ±10%; 50-400 cps; 7 watts (See Alternate Power Models Below)

Size and Weight —
Dimensions 3½" high x 6½" wide x 7¾" deep
Weight Less than four lbs.

Price —
Model 7050, F.O.B. Factory
1 - 4 ....................................................... 299.00
5 - 9 ....................................................... 275.00
10 - 24 ................................................... 260.00
25 & up ................................................... 249.00

ACCESSORIES
Current Shunts (Always use 1.5 V Range)

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Full Scale Current</th>
<th>Shunt Resistor</th>
<th>Tolerance</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>09045091</td>
<td>150 µA</td>
<td>10 KΩ</td>
<td>±0.1%</td>
<td>$10</td>
</tr>
<tr>
<td>09045101</td>
<td>1.5 MA</td>
<td>1 KΩ</td>
<td>±0.1%</td>
<td>$10</td>
</tr>
<tr>
<td>09045111</td>
<td>15 MA</td>
<td>100 Ω</td>
<td>±0.1%</td>
<td>$10</td>
</tr>
<tr>
<td>09045121</td>
<td>150 MA</td>
<td>10 Ω</td>
<td>±0.1%</td>
<td>$10</td>
</tr>
<tr>
<td>09045131</td>
<td>1.5 A</td>
<td>1 Ω</td>
<td>±0.3%</td>
<td>$20</td>
</tr>
</tbody>
</table>

NOTE: Complete set of above 5 shunt resistors Price $45

Rack Mount 3½" High; Will hold one or two 7050's.
Stock No. 93000256 Price $30

Tilt Stand/Handle;
Stock No. 64020251 Price $16

Probe with pushbutton "hold" control and "Volts" - "Ohms" select switch and two input connections.
Stock No. 93000257 Price $22

Model 7050 with combination Tilt Stand/Handle