

DO7E

RUGGED DIGITAL MICRO OHMMETER FOR LOW RESISTANCE MEASUREMENT

The DO7e is a very rugged yet compact and portable digital micro ohmmeter for the measurement of low resistance. Using a rechargeable sealed lead acid battery with built-in charger, the DO7e is capable of measuring with a current of 10 Amps on the lowest range. The DO7e has been designed with the latest solid state and microprocessor techniques to ensure the very best in measurement, reliability and features. Automatic range selection, forward and reverse current measurements with auto average and a remote start socket are all included as well as an energy saving power down mode.

KEY FEATURE

DO7E

True 4 wire measurement eliminates lead resistance	■
6 push button ranges 6 milli ohm to 600 ohm	■
Resolution 1 micro ohm on 6 milli ohm range	■
Auto ranging	■
10 Amp measuring current on lowest range	■
0.8" LED Display daylight viewable	■
Input protection up to 415 Volts rms	■
Forward and reverse current measurement	■
Auto average of forward and reverse measurement	■
Auto power off	■
Mains / rechargeable battery operation	■
Digital calibration pass code protected	■



DO7E SPECIFICATIONS

Range	Resolution	Typical Current	Accuracy at 20°C ±5°C, 1 Year	Temp Coefficient/°C
600Ω	100mΩ	1mA	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
60Ω	10mΩ	10mA	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
6Ω	1mΩ	100mA	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
600mΩ	100μΩ	1A	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
60mΩ	10μΩ	1A	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
6mΩ	1μΩ	10A	±(0.25% Rdg +0.05% FS)	40ppm Rdg + 250ppm FS

Measurement

4 Terminal Kelvin / Thomson principle eliminates errors due to lead resistance. Open circuit measurement voltage = 2V dc

Display

0.8" LED 6000 count with automatic decimal point and polarity indication

Range

6 push button selected with LED indication

Terminals

Binding posts accept 4mm spade tags, 6mm bare wires and 4mm banana plugs (4mm safety sockets)

Working Temperature

0°C to 40°C rel. humidity 80% max. non-condensing

Storage Temperature

-20 to +50°C

Mains Supply

115/230 Volts +10%-10%
47 to 63Hz 20VA

Safety

EN 61010-1 EMC - EN 61236

Dimensions

343mm x 327mm x 152mm (W D H) approx

Mass

6kg approx

Protection

415 Vrms maximum at input terminals

Calibration

Digital Pass code protected

Battery

Sealed lead acid battery with built-in charger. Greater than 1000 measurements on lowest (10A range) and 20 hours on other ranges from a fully charged battery

Average

Automatic average and display of measurement with forward and reverse current

CODE	ITEM	DO7E OPTIONS
CB03	Lead bag attaches to lid of DO7e must be ordered with DO7e	
D07 RS	Remote start plug	
FS01	Remote start foot switch	
HS01	Duplex handspikes with 3 metre lead length	
HS01 RS	Duplex handspikes with 3 metre lead length with remote start button suitable for DO7 and DO7e	
HS02	Duplex handspikes with 3 and 15 metre lead length	
HS02 RS	Duplex handspikes with 3 and 15 metre lead length with remote start button	
LS03	Lead set with 3 metre leads terminated in large Kelvin clips type KC3	
LS04	Lead set with 3 metres and 15 metres lead length terminated in large Kelvin clips type KC3	
MTS2	Calibration standard	