SEAWARD

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 10A 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 Features

- True 4 wire measurement eliminates lead resistance
- **6** push button ranges $6m\Omega$ to 600Ω
- Resolution $1\mu\Omega$ on $6m\Omega$ range
- Auto ranging
- 10A measuring current on lowest range
- 0.8" LED display daylight viewable
- Input protection up to 415Vrms
- Forward and reverse current measurement
- Auto average of forward and reverse measurement
- Auto power off
- Mains/rechargeable battery operation
- Digital calibration pass code protected

Ideal For

- Aerospace
- Automotive
- Military
- Utilities; electrical, water and gas



Technical Specifications

| Range | Resolution | Typical Current | Accuracy @ 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 = 2VDC

Display

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

Ranges

6 push button selected with LED indication

Terminals

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

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

Storage Temperature -20 to +50°C

DOD 0 ...

Mains Supply

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

Safety EN 61010-1

Protection 415Vrms 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

General Specifications . .

| DO7e Optional Accessories | | | | |
|---------------------------|---|-------------|--|--|
| Code | Item | Part Number | | |
| DO7-RS | Remote start plug | 190109 | | |
| HS01 | Duplex handspikes with 3m lead length | 190082 | | |
| HS01-RS | Duplex handspikes with 3m lead length with remote start button | 190083 | | |
| HS02 | Duplex handspikes with 3 and 15m lead length | 190055 | | |
| HS02-RS | Duplex handspikes with 3 and 15m lead length with remote start button | 190058 | | |
| LS03 | Lead set with 3m leads terminated in large Kelvin clips type KC3 | 190042 | | |
| LS04 | Lead set with 3 and 15m lead length terminated in large Kelvin clips type KC3 | 190046 | | |
| MTS2 | Calibration standard | 930241 | | |
| CH01 | Kelvin test probe (set of 2) | 930108 | | |

Dimensions 343 x 327 x 152mm / 13.5 x 12.9 x 6" (w x d x h) approx

Mass

6kg/13lbs approx

Services

1 year warranty (subject to product registration with Seaward. Visit www.seaward.co.uk/register-product)

Service and calibration by Calibrationhouse. Go to www.calibrationhouse.com for more information

Part Number 930113

www.seaward.co.uk/DO7e For USA, Canada and Mexico enquiries Tel: +1 (813) 886 - 2775 For all other enquiries Tel: +44 (0) 191 587 8741 Email: sales@seaward.co.uk