

# **DO7**e

## 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
- $\blacksquare$  6 push button ranges 6m $\Omega$  to 600 $\Omega$
- Resolution 1μΩ on 6mΩ range
- Auto ranging
- 10A measuring current on lowest range
- 0.8" LED display daylight viewable
- 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

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## **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  |
| $6\Omega$           | $1 m\Omega$ | 100mA           | ±(0.25% Rdg +0.05% FS)     | 40ppm Rdg + 30ppm FS  |
| 600mΩ               | 100μΩ       | 1A              | ±(0.25% Rdg +0.05% FS)     | 40ppm Rdg + 30ppm FS  |
| $60 \text{m}\Omega$ | 10μΩ        | 1A              | ±(0.25% Rdg +0.05% FS)     | 40ppm Rdg + 30ppm FS  |
| $6 m\Omega$         | 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

 $0.8\ensuremath{^{"}}$  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

Mains Supply

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

Safety

EN 61010-1

Calibration

Digital pass code protected

**Battery** 

Sealed lead acid battery with built-in charger.

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

 $\ensuremath{\mathsf{1}}$  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

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