SEAWARD

DO7

Rugged digital micro ohmmeter for low resistance measurement

The DO7 is a practical instrument for low resistance measurement, ideal for use in the workshop, field or test facilities. It is of rugged construction in a sealed ABS plastic case with lid and carrying handle. The DO7 has many advanced features, including protection up to 415Vrms at the measuring terminals, digital calibration and long scale length, 6,000 count. Rechargeable batteries mean real portability with more than 1 hour of continuous operation on the lowest ranges, and 20 hours on all others. Battery charge indicators are provided. The internal charger will boost charge to 90% of full charge, switching automatically to a trickle maintenance charge. Warning LEDs illuminate when an open circuit lead condition is detected. A front panel socket provides a serial RS232 output for connection to an external printer or PC, and a socket is also provided for the connection of an external start switch, e.g. a foot switch.

The DO7 is supplied ready for use with batteries, mains cord and test leads, no extras are normally necessary. For special lead sets we offer a variety of different styles which are listed on the accessories page, together with calibration standards.

Key Features

- True 4 terminal measurement eliminates lead resistance errors
- 10A measuring current
- Rechargeable batteries with built-in charger
- Measuring range 600μΩ to 60Ω
- Resolution 0.1μΩ on 600μΩ range
- 0.8” LED display daylight viewable
- Auto average of forward and reverse measurement
- Remote start socket
- All solid state design
- Wide range of leads and accessories available
- RS232 printer output

Ideal For

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

www.seaward.co.uk/DO7
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

Technical Specifications

Range	Resolution	Typical Current	Accuracy @ 20°C±5°C 1 year	Temp Coefficient/°C
60Ω	10mΩ	1mA	±(0.15% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
6Ω	1mΩ	10mA	±(0.15% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
600mΩ	100μΩ	100mA	±(0.15% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
60mΩ	10μΩ	1A	±(0.15% Rdg +0.05% FS)	40ppm Rdg + 30ppm FS
6mΩ	1μΩ	10A	±(0.2% Rdg +0.01% FS)	40ppm Rdg + 30ppm FS
600μΩ	0.1μΩ	10A	±(0.2% Rdg +0.2% 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 6,000 count with automatic decimal point and polarity indication

Ranges
6 push button selected with LED indication

Terminals
6mm binding posts accept spade tags and 4mm banana plugs

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

Storage Temperature
-20 to +50°C

Mains Supply
100/120/220/240V
+10% - 13% 47Hz to 63Hz. max 80VA

Safety
EN 61010-1 Protective Class 1

Protection
415Vrms maximum at input terminals

Calibration
Digital, security key protected

Battery
Sealed lead acid, rechargeable cells giving a minimum of 1 hour of continuous measurement on the lowest 10A ranges and 20 hours on all other ranges. Internal charger with battery state indicator

Average
Automatic average and display of measurement with forward and reverse current

General Specifications

DO7 Plus 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
LS05	Lead set with 4 x 1m leads terminated in banana plugs, 4 x crocodile clips, 4 x test probes and 2 x Kelvin clips type KC1 in miniature Kelvin clips type KC2	190004
MTS2	Calibration standard	930241
RSLO1	RS232 cable	930146

Dimensions
343 x 327 x 152mm /
14 x 13 x 6" (w x d x h) approx

Mass
8kg/18lbs 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
930119

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