

# DO4000 Series

Hand held, general purpose, portable digital micro ohmmeters combining all the features you might need

The series DO4000 digital micro ohmmeters offer true portability without any sacrifice to accuracy or functionality.

These ruggedly constructed instruments are housed in a stylish plastic case, with easy to use keyboard. The measured values are displayed on a large LCD screen which allows for ease of viewing.

Automatic or manual range selection is available and many advanced features are included. The table to the right will help with your selection needs as there are three models in the range.



Key Features	DO4000	DO4001	DO4002
True 4 terminal measurement eliminates lead resistance errors	✓	✓	✓
Measuring range from 40mΩ to 4kΩ	✓	✓	
Measuring range from 4mΩ to 400Ω			✓
10μΩ resolution	✓	✓	
1μΩ resolution			✓
True zero capabilities	✓	✓	✓
Digital calibration	✓	✓	✓
Auto/manual range selection	✓	✓	✓
Automatic temperature compensation		✓	
Temperature measuring range -50 to +800°C		✓	
Open circuit lead warning on display	✓	✓	✓
100mA measuring current	✓	✓	
1A measuring current			✓
Auto power off to maximise battery life	✓	✓	✓

#### Ideal For

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

[www.seaward.co.uk/DO4000](http://www.seaward.co.uk/DO4000)

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## Technical Specifications

DO4000/DO4001 Specifications				
Range	Resolution	Typical Current	Accuracy @ 20°C±5°C 1 year	Temperature Coefficient (°C)
4kΩ	1Ω	100μA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
400Ω	100mΩ	1mA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
40Ω	10mΩ	10mA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
4Ω	1mΩ	10mA	± (0.05% Rdg +0.03% FS)	30ppm Rdg + 4ppm FS
400mΩ	100μΩ	10mA	± (0.05% Rdg +0.05% FS)	30ppm Rdg + 25ppm FS
40mΩ	10μΩ	100mA	± (0.05% Rdg +0.01% FS)	30ppm Rdg + 25ppm FS

DO4002 Specifications				
Range	Resolution	Typical Current	Accuracy @ 20°C±5°C 1 year	Temperature Coefficient (°C)
400Ω	100mΩ	1mA	± (0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
4Ω	10mΩ	10mA	± (0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
40Ω	1mΩ	100mA	± (0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
400mΩ	100μΩ	1A	± (0.05% Rdg +0.03% FS)	30ppm Rdg + 4ppm FS
40mΩ	10μΩ	1A	± (0.05% Rdg +0.05% FS)	30ppm Rdg + 25ppm FS
4mΩ	1μΩ	1A	± (0.05% Rdg +0.01% FS)	30ppm Rdg + 25ppm FS

### Measurement

4 terminal Kelvin/Thomson principle eliminates errors due to lead resistance

### Display

15mm LCD 4000 count with automatic decimal point and polarity indication

### Ranges

6 automatic or manual selection with LED indication

### Terminals

4mm safety sockets

### Safety

EN 61010-1 EMC-EN 61236

### Zero & Ave

Buttons to null measurement offsets

### Protection

415Vrms maximum at the measuring terminals will blow internal protection fuse

### Calibration

Digital security key protected

### Battery

Removable pack with 5 1.5V non-rechargeable batteries. Separate rechargeable pack, charger and docking station as optional extras

## General Specifications

DO4000 Series Optional Accessories		
Code	Item	Part Numbers
4000-01	Rechargeable battery pack includes battery cassette with rechargeable batteries. Docking station also acts as bench stand and charger	930184
4000-02	Replaceable battery holder with non-rechargeable batteries	100124
4000-03	Replaceable battery holder with rechargeable batteries	100125
CB02	Carrying bag with shoulder strap and lead pouch that has a clear front panel to enable full operation	200290
HS01-P	2 x Duplex handspike with 3m lead length	190077
HS02-P	Duplex handspikes with 3 and 15m lead length	190057
LS03-P	Lead set with 3m leads terminated in large Kelvin clips type KC3	190045
LS04-P	Lead set with 3 and 15m lead length terminated in large Kelvin clips type KC3	190046
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	190004
LS06-P	Lead set with 1m leads terminated in miniature Kelvin clips type KC2	190050
MTS2	Calibration standard	930242
CH01	Concentric handspikes	930108
PT01-4000	Rod type Pt100 probe with 2m lead	190035
PT03-4000	Stubby Pt100 probe for ambient temperature measurement	190037

### Dimensions

215 x 130 x 55mm / 8.5 x 5.1 x 2.2" (w x h x d) approx  
467 x 374 x 216mm / 18 x 15 x 8.5" (w x h x d) packed in carton

### Mass

0.8kg / 2lbs approx

### Working Temperature

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

### Storage Temperature

-20 to +50°C

### Services

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

Service and calibration by Calibrationhouse.

Go to [www.calibrationhouse.com](http://www.calibrationhouse.com) for more information.

### Part Numbers

DO4000: 930000 DO4001: 930001 DO4002: 930139

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