

# Data Sheet

## Digital Milli-Ohm Meter Model 310

The model 310 Digital Milli-Ohm Meter is used to ensure continuity and integrity of a wire, cable, conduit or any electrical connection. The 310 has a display resolution of 100 micro-ohms and has a professional four wire Kelvin test lead set included to ensure accurate readings. The heavy duty case has a rubber seal to make the unit water resistant and a convenient shoulder strap.

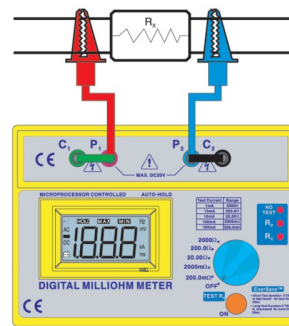
### Features & Benefits

- Four wire Kelvin lead measurements
- Over-voltage and over-temperature protection
- 5 ranges with 100  $\mu\Omega$  max. resolution
- Water resistant case with shoulder strap
- Auto Power Off
- IEC/EN 61010-1 / CE
- Included: 4-wire Kelvin leads, carrying case with shoulder strap and batteries



Specifications	310
<b>Electrical</b>	
Measuring ranges	0-200.0 m $\Omega$ in steps of 100 $\mu\Omega$ 0-2000 m $\Omega$ in steps of 1 m $\Omega$ 0-20.00 $\Omega$ in steps of 10 m $\Omega$ 0-200.0 $\Omega$ in steps of 100 m $\Omega$ 0-2000 $\Omega$ in steps of 1 $\Omega$
Accuracy	$\pm 0.5\%$ of reading $\pm 2$ digits over the operating temperature range -15 $^{\circ}$ C to +55 $^{\circ}$ C, with the supplied test leads.
Test current	1 mA => 2000 $\Omega$ range 10 mA => 200 / 20 $\Omega$ ranges 100 mA => 2000 m / 200 m $\Omega$ ranges.
Test current accuracy	$\pm 0.1\%$
Protection fuses	Supply: 1.5 A, HBC, 5 x 20 mm, DIN Current: 1 A, HBC, 5 x 20 mm, DIN Voltage: 0.5 A, HBC, 5 x 20 mm, DIN
Safety	LVD BS EN 61010-1 EMC BS EN 50081-1, BS EN 50082-1
<b>Mechanical</b>	
Bump test	IEC68-2-29
Vibration test	IEC1010, clause 8.3
Drop test	IEC1010, clause 8.4
Impact test	IEC1010, Clause 8.2
Rated environmental conditions	Indoor use Pollution degree 2 Altitude up to 2000 meter Relative humidity 80% max. Ambient temperature 0 $^{\circ}$ C~40 $^{\circ}$ C
<b>One Year Warranty</b>	
Weight	3.4 lbs (1.542 kg)
Dimensions (WxHxD)	9.82" x 4.33" x 7.48" (250 x 110 x 190 mm)

### Simplified Measurement



### Applications

The model 310 Digital milli-ohm meter, with its measuring range of 100  $\mu\Omega$  to 2000  $\Omega$ , is suitable for a wide range of applications such as:

- Measuring the winding resistance of electric motors, generators and transformers
- Bond testing in mines, aircraft, railways, ships, domestic and industrial wiring installations
- Measuring the ring main continuity testing in industrial and domestic wiring installations
- Measuring resistance in electronic equipment such as shunts, pcb tracks, switch and relay resistance
- Checking compression joints on overhead lines
- Testing and maintenance of switchboard /sub-station equipment on such items as fuses, joints, contacts and bonds