



ADWEL INTERNATIONAL LTD.

## DIGITAL RESISTANCE METER

*Light Weight, Automated Contact Resistance Measurement*

Model DRM-100

- *Precise contact resistance measurement*
- *True DC current is automatically ramped up and down*
- *Test cycle programmable from 10-60 seconds*
- *High input insulation level. Up to 1000 Volts on device under test*
- *Large, bright, high resolution, color screen*



### Description

The DRM-100 can precisely measure contact resistance on circuit breakers, switches, bus bar joints and other low resistance devices in a high voltage environment.

Up to 100 Amps of pure DC current is smoothly ramped up and down automatically to prevent current transients that can lead to unwanted operation of protection relays. Output current is preset by operator to a value between 10-100 Amps and is maintained for a preset time period between 10-60 seconds.

A 20-Amp *continuous* mode is also provided to aid in trouble shooting by allowing the operator to move and relocate the potential leads during testing.

The DRM is specifically designed for rough usage and to

function reliably in energized EHV substations where high electrical and magnetic fields are frequently present.

The DRM was also designed to function accurately and reliably with up to 1000 VAC of noise present on the device under test - a common condition in energized transformer stations.

Test results are displayed in extra large font on the bright color LCD screen.

Membrane switch buttons surround the screen for setting the test current, test time and for initiating the test.

The DRM uses the 4-terminal method of resistance measurement to eliminate the effects of lead resistance.

# DIGITAL RESISTANCE METER

## Features

- Continuous mode for trouble shooting
- High accuracy and resolution
- Emergency OFF button and auxiliary grounding terminal for safety
- High strength and waterproof Instrument case for rough field use
- Test leads and accessories in separate carrying case
- Also available with internal memory, printer, USB port. Model DRR-100
- Color screen
- Auto ranging



## Specifications

<b>Power</b>	90 to 265 V 50/60 Hz. 600 VA
<b>Test Current</b>	10 to 100 Amps
<b>Test Period</b>	10-60 seconds at 10-100 Amps
	Continuous at 20 Amps
<b>Auto ranges at 10-100 Amps</b>	0.1 micro-ohms to 1999.9 micro-ohms
	2000 micro-ohms to 19999 micro-ohms
	0.1 micro-ohms to 199.99 milliohms (at 10 Amps only)
<b>Accuracy</b>	± 0.5% of reading ± 0.5% of range
<b>Display Resolution</b>	4½ digits
<b>Graphic User Interface</b>	12 x 9cm (4¾" x 3½") bright LCD display visible in bright sunlight.
	Display resolution of 640 x 480.
<b>Insulation Level</b>	1000 Vac on device under test
<b>Housing</b>	Rugged, waterproof to IP-67
<b>Environmental</b>	Operating temperature: -10° to +50°C (+14° to +122°F)
	Storage Temperature: -15° to +80°C (+5° to +176°F)
	Relative Humidity: 0-95%, non-condensing
<b>Weight</b>	Instrument: 8.2 kg (18 lb.)
	Std. Lead Kit: 11.3 kg (25 lb.)
<b>Dimensions</b>	Instrument: 47 x 35.7 x 17.6 cm (18½" x 14" x 7")
<b>Approvals</b>	CE Compliance: EN61010, EN61326

\*Specifications are subject to change without notice.

## Represented by:

## Model DRM-100

### Kit Contents

- DRM-100
- Test leads 6.1m/20ft
- Operation Manual
- Accessories Case

### Optional Accessories

- Custom Lead Lengths
- Shipping Case

### Other ADWEL T&D Products

- Digital Winding Resistance ReporteR, DWR-10
- Digital Resistance ReporteR, DRR-100
- Current Transformer Test Set, CTX-2000
- Digital Transformer Ratiometer, DXR-2000C
- 5 kV Insulation Resistance Tester, Teraohm



ISO 9001: 2000 CERTIFIED

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