

## KTD40

# Multifunction Digital Loop Impedance Tester



- ▲ Low current – non trip – and high current loop impedance (Patented)
- ▲ High current test reads true loop impedance (including the supply transformers reactance)
- ▲ Full socket tester functionality built in
- ▲ Unique mains supply polarity test (checks that line and neutral are not switched at the supply)
  - ▲ Instant readout of PFC/PSC by use of secondary button
  - ▲ Voltage test function L-N, L-E & N-E
  - ▲ Fully protected against accidental to phase to phase protection

The **Kewtech KTD40** uses the latest in electronic design to produce a compact and feature packed test instrument. For instance it includes a full socket tester that will check for any mis-wiring at the socket. It will also check for the very hazardous condition of a reversal of line/neutral at the supply.

This instrument is capable of measure true loop impedance, this gives more relevant information when testing PSC/PFC as the reactance of the suppliers transformer measured as well as the pure loop resistance.

With the optional distribution loop test a high current two wire test can be carried out. A high or low current (non trip) test is conducted and after the reading is displayed the PFC or PSC can be shown instantly on the press of a second button.

## Specifications

### Wiring Test

Detects missing E or N (>15k $\Omega$ )  
 Detects L-E or L-N swap  
 Detects Live – Earth/Neutral reversal by use of Polarity Test Pad  
 Fault indicated by chart on front of instrument  
 Phase – Neutral voltage measurement  $\pm 1\% \pm 1V$   
 Phase – Earth voltage measurement  $\pm 1\% \pm 1V$   
 Neutral – Earth voltage measurement  $\pm 1\% \pm 1V$

### Loop Measurement

No trip mode 3 wire testing Phase – Neutral – Earth all connected. Test current <15mA at 253V AC

Range	Accuracy
0.00 to 9.99 $\Omega$	$\pm 5\% \pm 5$ digits
10.00 to 99.9 $\Omega$	$\pm 3\% \pm 3$ digits
100.00 to 500 $\Omega$	$\pm 3\% \pm 3$ digits

High current mode 2 wire testing Phase-Neutral or Phase-Earth connected using true impedance measurement – auto test (hands free) is selectable.

Range	Accuracy
0.00 to 9.99 $\Omega$	$\pm 3\% \pm 3$ digits

### PSC/PFC Measurement

10A – 19.9kA  
 This is a calculated result using the loop test measurement but it will be inherently more accurate than traditional methods as the test is of impedance not solely resistance.

### Over Voltage Protection

440V AC No damage – complete recovery

### Power

4 x AA batteries (not included).  
 Battery life (BS EN 61557) > 10,000 test

### Environmental

Operating Temperature Range	0°C to 40°C
Storage Temperature Range	-10°C to 60°C
Operating Humidity	80% @ 31°C to 50% @ 40°C
Size	157mm x 89mm x 39mm
Weight	400g

BS EN 61010-1, BS EN 61557

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