

# KTS1630 Multifunction Tester



KTS 1630

23

Multifunction Testers

**ROBIN**

**KTS 1630**  
£1249

The revolutionary KTS 1630 Digital Multifunction Tester can perform no fewer than TEN separate test functions...

The KTS 1630 can perform TEN separate test functions and provides all the test functions generally required in full compliance with BS 7671. The KTS 1630 can store test results which can be downloaded via the Infra Red Communication Port.

The KTS 1630 includes D-Lok technology to prevent tripping of most passive type RCD's when loop testing and during mains voltage and frequency measurement.

The KTS 1630 includes an innovative auto RCD testing feature which will automatically perform all of the relevant RCD tests (eg. x 1/2, x 1, x 5 etc.) in the correct sequence and all the user is required to do is reset the breaker at the relevant point in the test sequence.



## KTS 1630

### Advanced Data Storage System

The KTS 1630 stores data in a logical and convenient way.

Each test result is assigned to a user selectable site reference number (1-999), a distribution board reference number and a distribution board way number. Consequently, each test result is tagged with its own unique reference making data retrieval and reviewing of that data easier and quicker.

Furthermore, the user can tag insulation and continuity measurements as being phase, neutral, phase to phase, or phase to neutral/earth tests.



**free**  
QuickCert  
software  
included

The KTS 1630 is an advanced multifunction tester that provides all of the test functions generally required to verify the safety of electrical installations. The instrument has been designed to meet the requirements of BS 7671 (the IEE Wiring Regulations) and relevant safety standards.

### KTS 1630 Key Features

#### Earth Resistance

**Voltage Warning**  
User warning display if voltage at input terminals is greater than 25V

#### Continuity and Insulation Testing

##### Live Circuit Warning

A colour coded (red) LED warns if the circuit under test is live

##### Continuity null

Allows automatic subtraction of test lead resistance from continuity measurements

##### Polarity switch

Allows switching of polarity during continuity and insulation tests

##### Auto discharge

Electric charges stored in capacitive circuits are discharged automatically after testing

### Loop Impedance, PSC and RCD testing

#### Voltage Measurement

Supply voltage is displayed when the instrument is connected to the supply until the test button is pressed

#### Wiring Check

Three LED's indicate if the wiring of the circuit under test is correctly connected

#### Over temperature

Detects overheating of the internal resistor (used for loop and PSC tests) and of the current MOS FET (used for RCD tests) displaying a warning symbol and automatically halting further measurements

#### Phase angle selector

The test can be selected from either the positive (0°) or from the negative (180°) half-cycle of voltage. This will prevent tripping of some polarised RCDs when loop testing and may give a more accurate reading when testing RCDs

#### DC test

Allows testing of RCD's which are sensitive to DC fault currents

#### RCD tests at 110V

Allows RCD tests to be undertaken on 110V AC systems

#### Auto data hold

Holds the displayed reading for a time after the test is complete

#### Auto power off

Automatically switches the instrument off after a period of approximately 30 minutes of non-use.

### V-NE Monitoring Circuit

Automatically aborts measurement when the N-E voltage rises to 50V or greater on RCD ranges

### Fault Current

#### P-E Test

Phase to Earth prospective short circuit current test

#### Phase Rotation

#### Overload Protection

3 Phase Rotation indication with internal overload protection

### General

#### LED indication of live circuit warning

Illuminates if there is an alternating voltage of 50V AC or more in the circuit under test before continuity of insulation resistance tests. When DC voltage is detected across the measuring terminal the LED lights up

#### LED indication of correct Polarity

The P-E and P-N illuminate when the wiring of the circuit under test is correct. The red LED lamp is lit when P and N are reversed

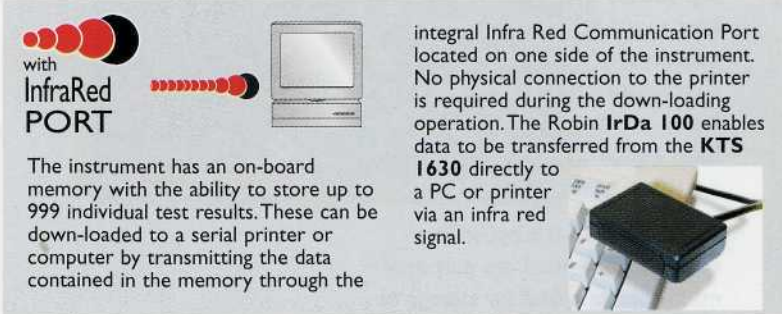
#### Display

The liquid crystal display has 3 1/2 digits with a decimal point and units of measurement (ohm, MΩ, A, mA, and ms) relative to selected function. The display is updated approximately five times per second

#### Overload protection

The continuity test circuit is protected by a 0.5 A 600 V fast acting (HRC) ceramic fuse mounted in the battery compartment, where a spare fuse is stored

- Continuity Tester
- Insulation Tester
- Loop Impedance Tester
- RCD Tester
- PSC Tester
- Fault Current Tester
- Earth Resistance Tester
- Phase Rotation Tester
- Mains Frequency Measurement
- Mains Voltage Measurement



with **InfraRed PORT**

The instrument has an on-board memory with the ability to store up to 999 individual test results. These can be down-loaded to a serial printer or computer by transmitting the data contained in the memory through the integral Infra Red Communication Port located on one side of the instrument. No physical connection to the printer is required during the down-loading operation. The Robin IrDa 100 enables data to be transferred from the KTS 1630 directly to a PC or printer via an infra red signal.

### KTS 1630 Accessories

#### Included:

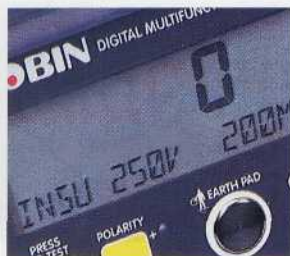
- Earth Resistance Spikes,
- SLP5 Earth Probe,
- SL20 Snap-Lok Test Leads,
- Distribution Board Test Leads (Model SL18E),
- Moulded Plug Test Lead (Model KAMP12),
- QuickCert Software, Accessory Pouch,
- Durable Holdall, Batteries,
- Certificate of Conformity.

#### Optional

Certificate of Calibration, IrDa 100.



On board micro-processor controlled memory stores up to 999 individual test records



Clear, easy to read display



10 functions in one compact instrument

<b>KTS 1630</b>
<b>Dimensions</b> 220 x 210 x 105 mm
<b>Weight</b> 1130g including batteries
<b>Power Source</b> 8 x 1.5V R6 or LR6
<b>CONTINUITY TESTING</b>
<b>Measuring Ranges</b>
20 / 200 / 2000Ohm Autoranging
<b>Open Circuit Voltage</b> >6V (as per BS 7671)
<b>Short Circuit Current</b> >200mA DC (as per BS 7671)
<b>Accuracy</b> 20/200Ohm $\pm(1.5\% + 3 \text{ dgt})$ 2000 $\pm(15\% + 3 \text{ dgt})$
<b>INSULATION TESTING</b>
<b>Measuring Ranges</b> 0/2000MOhm Autoranging
<b>Test Voltages</b> 250V, 500V and 1000V DC
<b>Output Voltage on Open Circuit</b>
250V + 20% - 0%    500V + 20% - 0%    1000V + 20% - 0%
<b>Rated Current</b> >1mA (as per BS 7671)
<b>Accuracy</b> 0~100M $\pm(2\% + 2 \text{ dgt})$ 100M $\Omega$ ~ 2000M $\pm(2\% + 4 \text{ dgt})$
<b>LOOP IMPEDANCE TESTING</b>
<b>Rated Voltage</b> 230V AC + 10% (50Hz)
<b>Voltage Measuring Range</b> 100 - 250V AC (50Hz)

<b>Impedance Ranges</b> 20 / 200 / 2000Ohm
<b>Nominal Test Current</b>
25A (200Ohm range), 1.2A (2000Ohm range), 1.2A (2000Ohm range)
<b>Test Period</b> 1/2 cycle (10ms)
<b>Base Accuracy</b> 20 $\Omega$ range: $\pm(2\% + 2 \text{ dgt})$
<b>PSC TESTING</b>
<b>Rated Voltage</b> 230V AC $\pm 10\%$ (50Hz)
<b>PSC Ranges</b> 2000A and 20kA
<b>Accuracy</b>
PSC accuracy derived from measured loop impedance specification and measured voltage specification
<b>RCD TESTING</b>
<b>Rated Voltage</b> 230V AC $\pm 10\%$ (50Hz)
<b>Trip Current Settings</b>
RCD x 1/2 : 10, 30, 100, 300, 500mA
RCD x 1 : 10, 30, 100, 300, 500mA
RCD x 5 : 10, 30, 100, 300, 500mA
<b>Trip Current Duration</b> RCD x 1/2 x 1 : 2000mS, RCD x 5 : 200mS fast trip 150 mS
<b>Accuracy</b>
Trip current + 10% - 0% of test current at 230V.
Trip time $\pm(2\% + 3 \text{ dgt})$

<b>FAULT CURRENT</b>
<b>Rated Voltage</b>
230V AC $\pm 10\%$ (50Hz)
<b>Fault Current Ranges</b>
2000A and 20kA
<b>Nominal Test Current</b>
1.2A (2000A) range 25A (20kA)
<b>Accuracy</b>
PSC accuracy derived from measured loop impedance specification and measured voltage specification
<b>EARTH RESISTANCE</b>
<b>Ranges</b> 20 $\Omega$ 200 $\Omega$ 2000 $\Omega$ 20000 $\Omega$
<b>Output Voltage</b> 100V P-P
Frequency 800Hz
<b>Accuracy</b> $\pm(2\% + 5 \text{ dgt})$
<b>Operating Temperature and Humidity</b>
0 to 40°C, relative humidity 80% or less
<b>User Warnings Displayed</b>
Live Circuit, Low Battery Power, Overtemperature, Incorrect Wiring