

Technical Specifications

Insulation Resistance

Insulation Resistance (nominal voltages 50V, 100V & 250V DC)

Measuring Range (MΩ)	Resolution (MΩ)	Accuracy
0.00 ... 19.99	0.01	±(5% of reading + 3 digits)
20.0 ... 99.9	0.1	±(10% of reading)
100.0 ... 199.9	0.1	±(20% of reading)

Insulation Resistance (500V and 1000V DC)

Measuring Range (MΩ)	Resolution (MΩ)	Accuracy
0.00 ... 19.99	0.01	±(5% of reading + 3 digits)
20.0 ... 199.9	0.1	±(5% of reading)
200.0 ... 999	1	±(10% of reading)

Voltage

Measuring Range V	Resolution V	Accuracy
0... 1200	1	±(3% of reading + 3 digits)

Resistance R LOWΩ

Measuring Range R(Ω)	Resolution (Ω)	Accuracy
0.00 ... 19.99	0.01	±(3% of reading + 3 digits)
20.0 ... 199.9	0.1	±(5% of reading)
200.0 ... 1999	1	±(5% of reading)

Open-circuit voltage: 6.5V DC ... 9V DC

Measuring current: min. 200mA into load resistance of 2Ω

Automatic polarity reversal of the test voltage

RCD Testing

General Data

Nominal residual current (A, AC): 10mA, 30mA, 100mA, 300mA, 500mA, 1000mA

Nominal residual current accuracy: ±5%

Test current shape: sine-wave (AC), pulsed (A)

RCD Type: G (non-delayed), S (time-delayed)

Test current starting polarity: 0° or 180°

Voltage range: 50V ... 264V (45Hz ... 65Hz)

Trip-out Time

Measuring Range (ms)	Resolution (ms)	Accuracy
0.0 ... 40.0	0.1	±1ms
0.0 ... max. time	0.1	±3ms

Trip-Out Current

Measuring Ranges IΔ	Resolution IΔ	Accuracy
0.2xIΔN ... 1.1, 1.5, 2.2xIΔN (AC type)	0.05xIΔN	±0.1xIΔN

Socket Test (RLN, RLPE, RNPE, RPE)

Measuring current: min. 200mA into load resistance of 2Ω

Measuring Range R(Ω)	Resolution (Ω)	Accuracy
0.00 ... 19.99	0.01	±(3% of reading + 3 digits)
20.0 ... 199.9	0.1	±(5% of reading)
200.0 ... 1999	1	

Test lead compensation: up to 5Ω

Automatic polarity reversal of the test voltage

Fault Loop Impedance

No RCD and With RCD

Measuring Range (Ω)	Resolution (Ω)	Accuracy
0.00 ... 9.99	0.01	±(5% of reading + 5 digits)
10.0 ... 99.9	0.1	
100 ... 999	1	±(10% of reading)
1.00k ... 9.99k	10	

Prospective fault current (calculated value)

Measuring Range (A)	Resolution (A)	Accuracy
0.00 ... 9.99	0.01	Consider accuracy of fault loop resistance measurement
10.0 ... 99.9	0.1	
100 ... 999	1	
1.00k ... 9.99k	10	
10.0k ... 23.0k		

Test current (at 230V): 6.5A (10ms)

Nominal voltage range: 30V ... 500V (45Hz ... 65Hz)

No trip out of RCD

R, XL values are indicative

Voltage, Frequency & Phase Rotation

Voltage

Result type: TRUE RMS

Nominal frequency range: 0Hz, 14Hz ... 500Hz

Measuring Range (V)	Resolution (V)	Accuracy
0 ... 550	1	+(2% of reading + 2 digits)

Frequency

Measuring Range (ms)	Resolution (ms)	Accuracy
0.0 ... 40.0	0.1	±1ms
0.0 ... max. time	0.1	±3ms

Phase Rotation

Result Displayed: 1.2.3 or 3.2.1

General Data

Overvoltage Category: 600V CAT III/300V CAT IV

Protection Degree: IP40

Display: 128 x 64 dot matrix display with baclight

Dimensions: 14cm x 8cm x 23cm

Weight: 1.0kg without batteries

Temperature Range: 0°C to 40°C

Maximum Reflative Humidity: 95% RH

Power Supply Voltage: 9 V DC (6 x 1.5 rechargeable batteries). 20 hours operation.

For Logging and Reporting Applications - InstalTest 3017



The InstalTest 3017 is a logging multi-function, installation and Pass/Fail tester with 4,000 results memory, compliance reporting software and Pass/Fail limits set to AS/NZS3017.

InstalTest COMBO

The 3-In-1 Complete Electrical Tester

1. Multi-Function Tester

Replaces 5 instruments with 12 tests in one instrument: Multimeter, Insulation Tester, RCD Tester, Fault Loop/Line Impedance Tester and Phase Sequence Tester.

2. Installation Tester

Installation testing to AS/NZS3000 and AS/NZS3017 covering Earth Continuity, Insulation Resistance, Polarity, Correct Connections, Fault Loop Impedance and RCD Tests.

3. Pass/Fail Tester

New “test sockets in seconds” with single push button **without trailing leads**. Preset and user defined Pass/Fail limits with red/green LED and on-screen tick and cross display.

Watch The “Test Sockets in Seconds” Training Video on YouTube



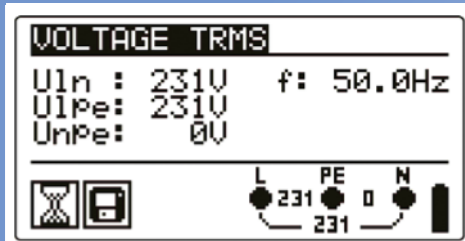
“Designed for Testing to AS/NZS3000 Wiring Rules and AS/NZS3017 Electrical Installations”

Available From:  
**EMONA**  
Emona Instruments Pty Ltd  
email: testinst@emona.com.au  
web: www.instaltest.com.au www.emona.com.au

<b>NSW – Sales</b> 78 Parramatta Road Camperdown N.S.W 2050 Tel (02) 9519 3933 Fax (02) 9550 1378	<b>VIC – Sales</b> 1206 Toorak Road Camberwell VIC 3124 Tel (03) 9889 0427 Fax (03) 9889 0715	<b>QLD – Sales</b> Unit 1, 1644 Ipswich Rd Rocklea QLD 4106 Tel (07) 3275 2183 Fax (07) 3275 2196	<b>WA – Sales</b> 231a Belmont Ave Cloverdale WA 6105 Tel (08) 9361 4200 Fax (08) 9361 4300	<b>SA – Sales</b> 3/26 The Parade West Kent Town SA 5067 Tel (08) 8363 5733 Fax (08) 8363 5799
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# InstaTest COMBO: The 3-In-1 Complete Electrical Tester

## Voltage, Frequency & Phase Sequence



Simultaneously measures voltages between L-N, L-PE and N-PE, phase sequence and frequency. Values are shown in real-time. On 3 phase systems it monitors voltages between phases and phase sequencing.

## Earth Resistance & Equipotential Bonding



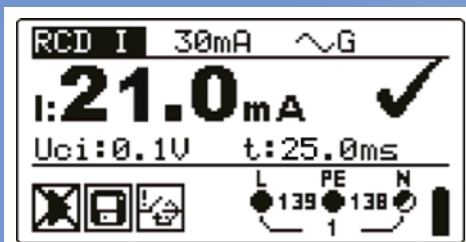
200 mA continuity test for testing resistance of earth conductors and equipotential bonding. Automatically swaps polarity. Limits can be set by the user, for example, 1  $\Omega$  and the COMBO indicates a Pass.

## Insulation Resistance



With test voltages from 50V to 1000V. Measures from 0.01M  $\Omega$  to 200M  $\Omega$ . Also displays instrument test voltage. Users can set limits for Pass/Fail indication of results, for example, 1M  $\Omega$  and the COMBO indicates a Pass.

## RCD Trip Time & Trip Current Test



Five RCD testing functions: contact voltage, trip time, trip current, RCD ramp test and AUTO which tests all RCD parameters with one button press. Users can also set test current waveform plus starting polarity.

## Complete Kit

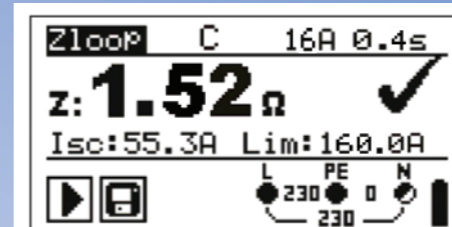


For everyday electrical work, all test leads, test probes and alligator clips are included.



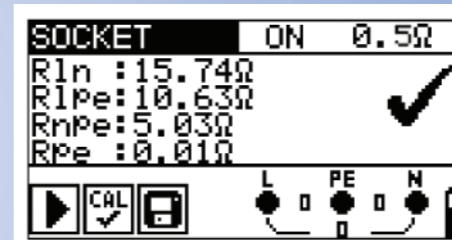
**InstaTest  
COMBO 3125**

## Fault Loop/Line Impedance/PSC



Two fault loop tests: **Z-loop** high current loop tests for non RCD protected circuits and **Zs-rcd** for low current loop tests guaranteed not to trip the RCD. Users can select fuse type, fuse current rating and fuse tripping time.

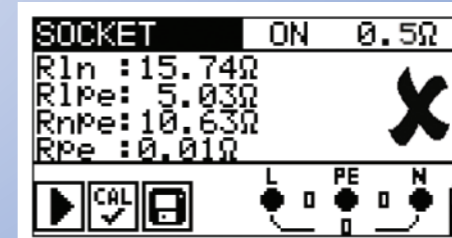
## Socket Test - Earth Resistance, Correct Connections and Polarity



Socket Test "Pass"

The InstaTest COMBO introduces the new single button "Socket Test" **without the need for trailing leads.**

The "Socket Test" performs Earth Continuity, Polarity and Correct Connections tests with a single push button and with Pass/Fail indication with a tick or cross and green/red LED indication.



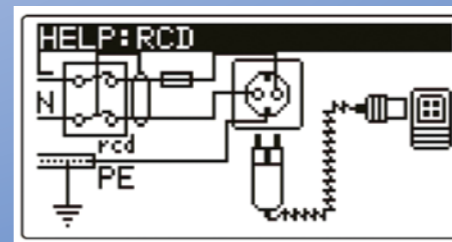
Socket Test "Fail" - Reverse Polarity

COMBO simplifies socket testing by reducing the number of tests required from 4 tests to a single push button test.



Plug in test lead & test sockets directly

## Help



Not sure of the connections for a test ... the COMBO unit is your best friend. Just press the HELP button and on-screen diagrams will help you get the job done right.