



Meeting Standards:

- * EN 60745
- * EN 61029
- * EN 60335
- * EN 60950
- * AS/NZS 3760

Building on our knowledge and experience in developing the SupaPAT™ Metrotest set about designing a PAT Tester from the ground up. We wanted to create a 'safety' tester, not just a compliance tester.

The result is the new METROiPAT™



Touch Screen

Intuitive

Customisable

'Real' Safety Testing

Dual Time Tags

Single & 3 Phase Testing

200mA, 10A & 25A Earth Tests

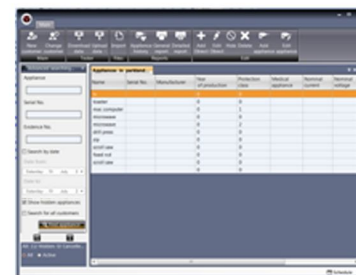
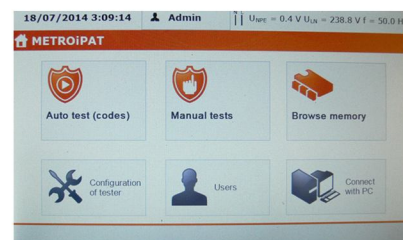
RCD Testing Portable & Installation

Designed to make testing easier and faster without compromising on safety. The newly developed operating system is both user friendly for the testing technician and rich in features for the varied needs of testing companies and their clients. Retesting has become easier with the introduction Dual Time Tags (DTT) and a whole new tagging system.

We wanted to design a tester and system that did not compromise on safety and made everyone's job easier and faster. With the new family of METROiPATs™ we believe we have achieved our goal.

FEATURES INCLUDE:

- * Designed around the needs of AS/NZS3760 (not adapted to) by a nationwide Test & Tag Company
- * Real Safety testing (including high current earth bond test), speed, audit ability and a truly flexible operating system sets it apart from its' nearest competitor
- * Custom Designable 'Help Menu'/Site inductions/Individual SOPS/JSA/Task Analysis sign off signature can all be placed on-board
- * Full colour touch screen to enable easy access, fast and efficient testing and data input without the need of other devices and minimising paper based systems
- * Output voltage and frequency constantly displayed
- * Intuitive user interface
- * Manual & automatic test codes
- * Single test ability
- * RCD tests both installation and portable RCDs including ramp test.
- * 'Dual Time' tagging and printing
- * Comprehensive download software Sonel PAT+ with easy data management
- * USB flash drive downloadable



Tester Only Technical Specs

-power supply	187...265V, 50Hz
-load current	Max. 16A (240V)
-data transmission to PC	USB, Wi-Fi
-dimensions	390x310x170
-weight	Approx 6.8kg
-operating temperature	0...+40 °C
-storage temperature	-20...+70 °C
-humidity	20...80%

Metrotest.Com Ltd
 sales@metrotest.com
 www.metrotest.com
 Call us on:
 NZ 0800638768
 AUS 1800789973

Measurement of L-N circuit resistance

Display range	Resolution	Accuracy
0...999Ω	1Ω	±(5% m.v. + 5 digits)
1,00...4,99kΩ	0,01Ω	

- test voltage: 4...8 V AC
- short-circuit current: max 5mA

Measurement of protective earth conductor resistance I=200mA (protection class I)

Display range	Resolution	Accuracy
0...0,99Ω	0,01Ω	±(4% m.v. + 2 digits)
1,00...19,99Ω		±(4% m.v. + 3 digits)

- Test current: ≥200mA for R=0,2...1,99Ω
- Adjustable limit
- Adjustable measurement time

Measurement of protective earth conductor resistance I=10A (protection class I)

Display range	Resolution	Accuracy
0...999mΩ	1mΩ	±(3% m.v. + 4 digits)
1,00...1,99Ω	0,01Ω	±(3% m.v. + 40 digits)*

* for two-wire measurement

- Technical method
- Test current: ≥10A for R≤0,5Ω
- Adjustable limit
- Adjustable measurement time

Measurement of protective earth conductor resistance I=25A (protection class I)

Display range	Resolution	Accuracy
0...999mΩ	1mΩ	±(3% m.v. + 4 digits)
1,00...1,99Ω	0,01Ω	±(3% m.v. + 40 digits)*

* for two-wire measurement

- Technical method
- Test current: ≥25A for R≤0,2Ω
- Adjustable limit
- Adjustable measurement time

Measurement of insulation resistance

Measurement range according to IEC 61557-2 for:

U_N=100 V: 100kΩ...99.9MΩ

U_N=250 V: 250kΩ...199.9MΩ

U_N=500 V: 500kΩ...599.9MΩ

U _N	Range	Resolution	Accuracy
100V	0...1999kΩ	1kΩ	±(5% m.v. + 8 digits)
	2,0...19,99MΩ	0,01MΩ	
	20,0...99,9MΩ	0,1MΩ	
250V	0...1999kΩ	1kΩ	
	2,00...19,99MΩ	0,01MΩ	
	20,0...199,9MΩ	0,1MΩ	
500V	0...1999kΩ	1kΩ	
	2...19,99MΩ	0,01MΩ	
	20,0...599,9MΩ	0,1MΩ	

- Adjustable limit
- Adjustable measurement time
- Automatic discharge of the capacity of the tested device after measurement
- Protection against measuring live devices

Measurement of PE and residual leakage current:

Display range	Resolution	Accuracy
0...3,99mA	0,01mA	±(5% m.v. + 2 digits)
4,0...19,9mA	0,1mA	

- Adjustable limit
- Adjustable measurement time

Measurement of equivalent leakage current:

Display range	Resolution	Accuracy
0...3,99mA	0,01mA	±(5% m.v. + 2 digits)
4,0...19,9mA	0,1mA	

- Adjustable limit
- Adjustable measurement time
- Open circuit voltage 25...50 V

Measurement of touch leakage current:

Display range	Resolution	Accuracy
0...4,999mA	0,001mA	±(5% m.v. + 3 digits)

- Adjustable limit
- Adjustable measurement time

Measurement of RCD parameters

RCD trigger and response time test t_a

Test range according to IEC 61557: 0 ms...to the upper limit of displayed value

RCD type	Current	Range	Resolution	Accuracy
General	0,5*I _{Δn}	0...300ms	1 ms	±(2% m.v. + 2 digits ¹)
	1*I _{Δn}			
	2*I _{Δn}	0...150ms		
	5*I _{Δn}	0...40ms		

¹ - accuracy of residual application I_{Δn}=10mA i 0,5 I_{Δn}:±2% m.v. ± 3 digits

Measurement of RCD disconnection current I_A for sinusoidal differential current

Test range according to IEC 61557: (0,3...1,0) I_{Δn}

Selected nominal current of RCD	Test range	Resolution	Test current	Basic uncertainty
10mA	3,3...10,0 mA	0,1 mA	0,3xI _{Δn} ...1,0xI _{Δn}	±5% I _{Δn}
15mA	4,5...15,0 mA			
30mA	9,0...30,0 mA			

- It is possible to start the measurement from the positive of the negative half of forced leakage current
- Test current passage time..... Max. 3200ms
- Automatic measurement of RCD disconnection time (t_A) and disconnection current
- Measurement for: 0,5I_{Δn}, 1I_{Δn}, 2I_{Δn}, 5I_{Δn}

Measurement of power S:

Display range	Resolution	Accuracy
0...999VA	1VA	±(5% m.v. + 3 digits)
1,00...3,99kVA	0,01kVA	

Measurement of power P

Display range	Resolution	Accuracy
0...999W	1W	±(5% m.v. + 3 digits)
1,00 k...3,99kW	0,01kW	

Measurement of power PF

Display range	Resolution	Accuracy
0,00...1,00	0,01	±(10% m.v. + 3 digits)

Measurement of current consumption:

Display range	Resolution	Accuracy
0,00...15,99 A	0,01 A	±(2% m.v. + 3 digits)

Measurement of power PF

Display range	Resolution	Accuracy
195,0...265,0 V	0,01 V	±(2% m.v. + 2 digits)