SMART RCD Testing

Rapid RCD testing system maximising safety and meeting compliance requirements

- **Save time and money**
- **Improves productivity**
- **Maximise safety**
- **Minimise downtime**
- **Minimise arc flash exposure**

Innovative Rapid RCD testing

What is Rapid Test

The Rapid Test System "RTS" is a Wi-Fi based RCD testing system which allows testing of RCD's to be performed quickly and safely.

Typically, RCD's are tested either directly at the RCD exposing the electrician to the risks of live work, or at socket outlets located throughout the building which is more time consuming for a technician but with reduced risk.

RTS not only reduces risk but reduces site downtime as the RTS system completes RCD testing up to 180 times faster than traditional RCD testing methods. RTS allows RCD's to be tested with the Panelboard escutcheon closed so there is no access to live parts. All the technician needs to do at the switchboard is physically reset the RCD.

The RTS can be installed with the Wi-Fi Master Module connected to a Channel Module containing 24 testing channels (with up to 10 Channel Modules per Master in total 240 RCD's can be tested off one Master) or a combo unit Wi-Fi Master with 8 channels built (with up to 9 channel units connect per combo allowing up to 224 RCD 'scan be tested). Each channel is then connected in parallel to the load at the RCD. The RTS RCD testing system is very easy to retrofit or integrate into a Panelboard.

Installation

- Can be integrating into the Panelboard if there is sufficient space noting the RTS is very compact and can be double stacked.
- Can be mounted separately in retrofit enclosure beside any existing Panelboard and cables are simply looped across for each RCD Circuit.

Why test RCDs

Functioning RCD's save lives, so it is imperative that the RCD works when they are needed most. Regular testing ensures both reliability and functionality of the RCD. The requirements for installation and maintenance of RCD's has been steadily increasing with changes to the wiring rules and implementation of harmonised Work Health and Safety "WHS" regulations. Harmonized WHS regulations have been gradually implemented state by state from 2012. These WHS regulations mandate RCD protection on all circuits in hostile environments with the following test requirements:

- Hostile – 6 month push button test, annual trip time test
- Non-Hostile – 6 month push button test, 2 yearly trip time test
- Australian Standard AS/NZS 3760 specifies the test requirements for RCD's

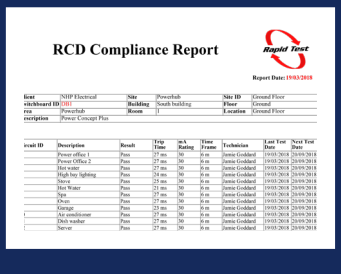
Return on investment

When you consider cost of an electrician conducting the RCD testing, the required "live work" observer and the production/site/workers down time, the payback period is quick. The considerable safety benefits associated with RTS is also reason enough to install Rapid Test.

Reporting

Testing is conducted using a tablet-based interface such as Windows 10 PC, Android or iPad. Testing reports are then emailed directly or can be uploaded to the cloud via an optional data hosting subscription service. Reports shows details of the testing technician, the date of testing, the next test date, and the recorded trip time of the RCD.

Key benefits



RCD Compliance Report

Rapid Test

Report Date: 19/03/2018

lient	NHP Electrical	Site	Powerlab	Site ID	Ground Floor
nicboard ID	DB1	Building	South building	Floor	Ground
ess	Powerlab	Room	1	Location	Ground Floor
escription	Power Concept Plus				

rcuit ID	Description	Result	Trip Time	mA Rating	Time Frame	Technician	Last Test Date	Next Test Date
	Power office 1	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Power Office 2	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Hot water	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	High bay lighting	Pass	24 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Stove	Pass	25 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Hot Water	Pass	21 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Spa	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Oven	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Garage	Pass	25 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Air conditioner	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Dish washer	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018
	Server	Pass	27 ms	30	16 m	Jamie Goddard	19/03/2018	28/09/2018

Maximum safety

- All components remain behind escutcheon
- No Exposure to live parts
- Exposure to arc flash virtually eliminated

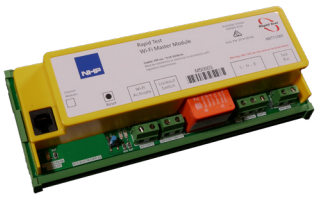
Save Time and Money

- Approximately 5 Seconds test time per RCD
- Automated test report
- No observer required

Rapid Test Product Selection Table

	NRTTUWFM	NRTMC8F5	NRTRB24F	NRTxxxLAN
Type	Master	Combo	Channel	TBA
Connection	Wi-Fi	Wi-Fi	NA	LAN
Control Voltage V AC	110/240	110/240	110/240	110/240
Min IΔn	10mA	10mA	10mA	10mA
Max IΔn 100% test	100mA	500mA	500mA	100mA
Max IΔn 500% test	30mA	30mA	30mA	TBA
No Channels	NA	8	24	TBA
No NRTRB24F that can be connected	10	9	-	TBA
Width	204mm	204mm	204mm	TBA
Height	86mm	120mm	86mm	TBA
Depth	55mm	60mm	55mm	TBA

Combo Unit



Master Unit

Channel Unit

Rapid Test Retrofit Product Selection Table

	NRTRFPC32CL	NRTRFCPL55G or NRTRFCPL55O [1]	NRTRFCPR55G or NRTRFCPR55O [1]	NRTRFCPR55L5G or NRTRFCPR55L5O [1]
Enclosure	Fibox Insulated	Concept Plus	Concept Premier	Concept Premier
Material	PC	1.6 mild steel	1.6 mild steel	1.6 mild steel
IP Rating	66	42	66	33
RCD Channels	32	55	55	55
Colour	Transparent	Grey or Orange	Grey or Orange	Grey or Orange
Width	380mm	600mm	600mm	600mm
Height*	560mm	432mm	432mm	432mm
Depth*	200mm	200mm	240mm	240mm
Connections	2.5mm² cable with 4mm terminals	2.5mm² cable with 4mm terminals	2.5mm² cable with 4mm terminals	5M loom 2.5mm² cable

Notes *excludes door handle and wiring loom

1) G for Grey or O for Orange enclosure

2) For other configurations contact NHP

Kits includes; Lock Out Key Switch, Wi-Fi Wake Up Pushbutton and Test/Verification Port.
Test/verification Port on Concept Plus and Premier models only.

Accessories

Cat No	Description
USB	Stacking bracket to suit Master and channel unit (pair)
USBL	Stacking bracket to suit Combo and channel unit (pair)
RT005	Sticker set 10 pack
RTSDC	RJ12 dust cover
RTSP	Surge divertor
FLx00	Communication cable 100mm, 300mm or 500mm
FLxx00	Communication cable 1000mm, 1500mm, 2000mm, 3000mm or 4000mm
VTL	Verification Lead
VTS	Verification Socket

NRTRFCPL55G

NRTRFCPR55L5O

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