

TnT® - GEN4 SERIES

Portable Appliance Testers



With three generations of Industry respected models and a proven pedigree you can rely on, the new Gen4 TnT Series is now available in Australia and New Zealand.

All Gen4 models provide a host of features and functions never before seen on any appliance tester.



With solid **10Amp** and ***20Amp** capability (***TnT +XM**) and a totally new **Meter Mode®** function (providing instant power, voltage and current measurements) the **Gen4 TnT** series boast a comprehensive list of tests and analysis as required under our AS/NZS 3760:2010 Standards.



Designed and Manufactured in Australia to meet stringent testing requirements - some of the tightest in the world - the **TnT Gen4** series now sets its own new standard of reliability and ruggedness.

This makes the **Gen4** a unique and specialised product, capable of performing any test as specified and reporting/recording results in a clear yet concise manner, with display readings that make sense.

Physical characteristics of the **Gen4** also have major design enhancements. From simple features such as an integrated carry handle, through to special removable inter-locking power cords, quick change fuse holder/spare fuse carrier, sloping top panel and front loaded test sockets.

The **TnT Gen4** series is the logical choice for serious Test & Tag operators, Industry and Mining.

Features include:

- ♦ Meter Mode  **TnT Gen4** series
- ♦ Simplified one button testing
- ♦ Test icons & Symbols on Large LCD
- ♦ Large fonts during tests showing results & progress
- ♦ Mains/Input Polarity test on startup
- ♦ Optional 20 Amp Operation (TnT+XM)
- ♦ True RCD ramp up test (RCD & + models)
- ♦ User settable functions
- ♦ Test extend capability
- ♦ Impact resistant and flame retardant casing
- ♦ Built in carry handle
- ♦ Flashing  Test Fail indicator

Wavecom Instruments– Superior Australian Technology
Australian designed and manufactured to support AS/NZS 3760: 2010 Standard

www.wavecom.com.au

Quick Overview:

The TnT series is developed around one of the most powerful Microprocessors used in any appliance tester world wide, allowing the TnT to perform a series of complex & accurate internal calculations.

The result is an easy to use, intuitive hand held Portable Appliance Tester (PAT), designed to test for electrical safety and accuracy of 240VAC rated appliances (including RCD results on specific models). Simple one button automatic testing makes this series fast and easy to use.

The TNT series provides operators the ability to fully comply with the requirements of the AS/NZS 3760 Standard. This advanced engineering also enables the Gen4 series to be updated/upgraded as specifications & Standards change in the future, providing owners with excellent return on investment.

The large Backlit LCD display shows easy to follow menus, meaningful icons & selectable test screens for simpler user operation.

‘On-start’ tests range from mains supply testing, check of connectivity, polarity with flashing fail indicators (also when test has failed), through to user selectable options where applicable, e.g. RCD ramp current etc. Functions vary depending on model, but the flexibility of this series suits all levels of Industry.

Advanced features include ability to extend some test functions/ times, e.g. the earth bond test to 30 seconds allowing operators to obtain proper contact with the earth of some appliances.

The TnT Gen4 series consist of 5 models, scaled up from the basic TnT el, through to on board digital RCD test models, PC connectivity (with WinPATs Software) & full Memory-Data upload/ download and storage capability. (Site Data etc.)

The new, compact **20 Amp** model TnT +XM is also introduced.

Select a tester from the chart to suit your individual needs.

Overview:- Memory Units TnT +M types

- **Storage of up to 5,000 Items-** with 8 tests per Item record. (40 000 total tests)
- Each item includes site (max 16), location, description, make, model, serial no., *asset no., test frequency, test type, comments, and no. of tests.
- Library can store thousands of locations, descriptions, makes, models and comments.
- Each test record has Date/Time Stamp from inbuilt RTC.
- Compatible with WCM-Scanner for easy data entry & retrieval.
- Upload and Download records to/from PC with WinPATs™ Memory Software. This may also be used as an ***Asset Management System** for non-electrical items
- **Mini Keyboard supplied** for site data & setup Item info. input
- Optional 20,000 item memory factory upgrade is available.

Tests Performed / Specifications

Mains Supply Test

- Checks Polarity and continuity of mains supply by LED indicators (A-N, A-E, and N-E). (Flashing - ⚡ Test Fail indicator)

CLASS 1 Earthed Appliance

- Appliance Check: Ensures appliance is plugged in and turned on.
- Earth Bond Test: 200mA test current. Pass level Less than 1.0 Ω. Measurement: 0.01Ω to 10 Ω.
- Insulation Test: 500VDC / 250VDC. Pass level Greater than 1M Ω. Measurement: 0.1Ω to 10MΩ. *See also Leakage Test

CLASS 2 Double Insulated Appliance

- Appliance Check: Ensures appliance is plugged in and turned on.
- Earth Bond Test: 200mA test current. Pass level Less than 1.0Ω. Measurement: 0.1Ω to 10Ω.
- Insulation Test: 500VDC / 250VDC. Pass level greater than 1MΩ. Measurement: 0.1Ω to 10MΩ. *See also Leakage Test

Extension Leads

- Earth Bond Test: 200mA test current. Pass level Less than 1Ω. Measurement: 0.01Ω to 10.0Ω
- Insulation Test: 500VDC / 250VDC. Pass level Greater than 1MΩ. Measurement: 0.1Ω to 10.0MΩ.
- Continuity/Polarity Test: 250VAC check continuity and polarity of leads. Displays Pass/Fail.

Leakage Test *

- Leakage Current: 0 to 30.0mA at 200 to 265V
- Earth Leakage Test: 240VAC Mains. Pass level 1, 2.5, 5.0 mA leakage test levels with up to 10Amp load operation.
*TnT+XM model is capable of up to **20 Amp** load
Note 1: Pass level for CLASS 1 is 5 mA
Pass level for CLASS 2 is 1 mA
Note 2: Leakage test may be performed if for any reason a standard CLASS 1 or CLASS 2 is not possible.

RCD Test

- Trip Current: 2 to 500mA in **1mA steps**. User selectable.
- Trip Time: 0 to 3,000ms at .001sec resolution.
- Current Ramp Trip Test: 0 to 500mA in **1mA increments**.

Power Measurement


- Leakage Current: 0 to 30.0mA at 200 to 265V
- Load Current: 0.0 to 10Amp (20Amp for TnT +XM)
- Voltage: 200 to 265VAC
- Power Factor: 0.00 to 1.00
- Apparent Power: 0 to 2400VA
- Power 0 to 2400W

Meter Mode®

- Load Current: 0.0 to 10Amp
- Voltage: 200 to 265VAC
- Apparent Power: 0 to 2400VA
- Power: 0 to 2400W

TnT® Gen4 Series

Tester Function Chart

	TnT el	TnT RCD	TnT +	TnT +M	TnT +XM
Meter Mode 	✓	✓	✓	✓	✓
Class I / Class II	✓	✓	✓	✓	✓
Extension leads	✓	✓	✓	✓	✓
Leakage Current	✓	✓	✓	✓	✓
500V Insulation / 250V Insulation	✓	✓	✓	✓	✓
RCD Testing		✓	✓	✓	✓
Mains Supply Test	✓	✓	✓	✓	✓
Power Measurement			✓	✓	✓
Data Connectivity to PC / Laptop <i>via</i> on-board USB port			✓	✓	✓
Printer Connectivity via laptop/PC			✓	✓	✓
Direct Tag Printer connectivity <i>via</i> on-board serial port				✓	✓
WCM Keyboard included with TnT Model				✓	✓
Direct Keyboard connectivity via on-board PS/2port				✓	✓
20 Amp Operation (Power & Earth Bond etc.)					✓
Memory - 5,000 Item Storage				✓	✓
Memory - 20,000 Item Storage (Factory upgrade option)				✓	✓
WinPATS base software			✓		
WinPATS software (optional)			✓		
WinPATS memory Base Software				✓	✓
WinPATS Memory Software (optional)				✓	✓
WCM-Keyboard				✓	✓

Contents

TnT -el G4

- Appliance tester with leakage test
- Instruction user guide
- Earth Bond lead 1800mm
- IEC to 3 PIN plug test lead 500mm
- Carry bag & Locking power lead

TnT RCD G4

- Same as TnT -el
- In-built RCD Test Module & Firmware

TnT + G4

- Same as TnT RCD
- WinPATS Base software
- Interface ports (scanner, printer & keyboard)
- USB Cable (for Connection to PC)

TnT +M G4

- Same as TnT +
- 5000 Item memory (on-board mem module)
- WinPATS Memory Base Software
- ***Includes WCM Compact Keyboard as standard for Site/Item Entry**

TnT +XM G4

- Same as TnT +m
- 20Amp operation, C/W 20A IEC Lead (15amp 3 Pin plug)

Note: TnT +M versions use keyboard for direct data entry on-site. No need for PC at site

Disclaimer – E&OE

All specifications may be subject to be change by Wavecom Pty. Ltd. without prior notice.

Updated Specifications & Model changes may be found on the Wavecom website:-

www.wavecom.com.au

TnT Gen4 models

all incorporating the new **METER MODE** function



Meter Mode Function

Meter Mode®, developed for the new TnT Gen4 Models, is unique and not found on any other PAT.

This very useful function is intended for quick and simple electrical measurements whilst providing accurate readings.

Though not intended to replace specific, possibly more accurate test equipment, quick tests are easily performed - e.g. - measuring power consumption of a bar heater or drill to check the ratings, test power/voltages on outlets around sites on different circuits, confirm specifications etc.

No need to carry around extra test gear like clamp or multi-meters.

Meter Mode features four discrete options - Volts, Amps, Watts, and Volt / Amps.

Electrical parameters are displayed on the large LCD screen as Volts in AC, Current in Amps, Power Measurement in Watts and VA in Volt/AMPS. Hold 'F3' in primary Menu Screen for 2 seconds and the screen will change to Meter Mode, showing Volts by default with the test socket not 'Live' until proceeding to actually test.

The TnT Gen4 stays locked in Meter Mode regardless of power on/off until you decide to exit this mode. No need to re-set each time you move to another power outlet or location. Appropriate warnings will flash ⚡ and the screen indicates when test socket is about to go 'Live'. Pressing 'ENTER' key will exit Meter Mode and return to normal functions.

"Brilliant Australian inventiveness!"

Features exclusive to the TnT Gen4

Unique Locking Power Cable:

This revolutionary locking, removable cable is intended not to dislodge during critical test procedures.



Rear Panel TnT+ Gen410amp Series



Rear Panel TnT+ Gen420amp Series



This product is totally Australian Designed and manufactured, using premium grade components and materials

Optional Accessories

WinPATSTM Base	Part No: WinPATSTM Base
WinPATSTM Full Version	Part No: WinPATSTM
WinPATSTM Memory base	Part No: WinPATSTM MBase
WinPATSTM Memory	Part No: WinPATSTM M
20,000 Item memory u/g	Part No: WCM -20KM
Tinned Earth Strap 500mm	Part No: TnT-ES500
3-Phase Adaptor	Part No: WCM-3 phase
WCM Barcode Printer	Part No: WCM -TTP
WCM Barcode Scanner	Part No: WCM -Scanner
Wireless Scanner	Part No: WCM -WScanner
Alligator/Probe Lead Set	Part No: WCM -Probe Set
Isolation Transformer	Part No: WCM -ISOT II
Hydraulic trolley	Part No: WCM-TROLLEY
Hard Transit case	Part No: WCM- HTC
WCM Compact Keyboard	Part No: WCM—KEYB
Adapter Cable- 20Amp/3Pin socket to 10Amp /3Pin plug	Part No: WCM-20/10

NOTE:- TnT Gen 4 Testers now include an extended Warranty Option. Standard Warranty period is **12 months** covering workmanship/materials under normal use.

Warranty or Service must be performed by Wavecom Instruments. Return shipping costs are the responsibility of the customer. Return shipping within Australian Capital Cities will be provided by Wavecom Instruments.

24 month Conditional Warranty:- The TnT must be CALIBRATED & Serviced every 12 months for the first 2 years by Wavecom Instruments. Otherwise the Standard Warranty will apply.

See www.wavecom.com.au for current Calibration charges.

Designed & Manufactured by

Wavecom Instruments Pty. Ltd.

Head Office :-

South Australia

257 Grange Road

FINDON, SA 5023

P: +61 08 8243 3500

F: +61 08 8243 3501

E: sales@wavecom.com.au

Victoria

772A Station Street,

Box Hill, VIC 3128

P: +61 03 9897 4711

F: +61 03 9897 4766

E: salesvic@wavecom.com

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