



Product Catalogue 2023 / 2024



18th Edition
Multifunction
Test Equipment

EVSE Testing Equipment

Solar Photovoltaic
Test Equipment

PAT Testing Equipment

Voltage Testers &
Safe Isolation Kits

Lock Off Kits
& Accessories

Thermal Image
& Boroscope Equipment

Digital Multimeters
Test Equipment

Digital Clamp Meter
Test Equipment

Socket Testers
NCV Detectors
& Specialised Equipment

Environmental
Test Equipment

Various Test Leads
& Carrying Cases

Electrical
Certificate Books

Power Quality Analysers
& Data Loggers

Network Testers

Earth Resistance
Test Equipment

Professional
Insulation Testers

Electrical Safety Labels

Electrical Starter Kit
& Knipex Tools

Calibration Service
In House or On Site
for Test Equipment
of most manufacturers



NAPIT
associate member



Version V023



YouTube



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Web: www.testinstrumentsolutions.co.uk

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Calibration Service

Full Details of our Service
and Instruments which we can Calibrate

Pages 72 & 73

MFT-PRO+ ULTIMATE

Ultimate Professional TRMS Multifunction Installation Tester
with Power Quality Analysis, Wi-Fi, Earth Electrode & EVSE Testing Capabilities

Please refer to pages 4 & 5 for the full specifications of the TIS MFT-PRO+.

The Ultimate kit comes complete with the HT96U Power Harmonic & Leakage Clampmeter & PR400 Remote Testing Probe.



MFT-PRO ULTIMATE

Ultimate Professional TRMS Multifunction Installation Tester
with Power Quality, Leakage & EVSE Testing Capabilities

Please refer to pages 6 & 7 for the full specifications of the TIS MFT-PRO.

The Ultimate kit comes complete with the HT96U Power Harmonic & Leakage Clampmeter & PR400 Remote Testing Probe.



SPECIAL FUNCTIONS

- NEW EVSE Testing Capabilities, Full Auto-Sequence using TIS EV-TEST100
- NEW 6mA Type B, DC RCD & Ramp Test for EVSE Charging Stations
- NEW RDC-DD 6mA Test to IEC 62955 for EVSE Testing
- NEW With 3 & 4 Wire Earth Electrode Testing
- NEW Auto Sequence performs Loop, RCD & both cycles of the Ramp Test from pressing the test button once
- RDC-DD is (Residual Direct Current Detecting Device)
- TFT Large Colour LCD Display, 320 x 240 pixels
- Phase to Phase Loop Testing
- TRMS for accurate measurements on noisy and distorted circuits
- Resistive Touch Screen, works even with gloves on!
- Full Help Schematic Display
- Built in Fuse Characteristic Table, ✓ OK and ✗ Fail Display
- Measurement of Continuity > 200mA
- Supplied with Neck Strap & Harness for Hands Free Use
- Displays both L-N, L-PE with PFC & PSC Simultaneously on No Trip Test
- Compliant with BSEN 61557-1-2-3-4-5-6-7 17th Amendment 3 & 18th Edition
- Accurate PRO-LOCK No Trip Loop Test
- Phase Sequence Measurement
- Accurate and Reliable, 'No Trip' Loop Testing
- Line / Loop Impedance, Phase - Phase Phase - Neutral, Phase - PE
- Insulation Test at 50, 100, 250, 500 and 1000V
- RCD Testing up to 1A, or 10A with optional adapter
- Automatic RCD Test, 0° 180°, x1 x5 x½, Contact Voltage
- Ramp Test in one visit
- Tripping time of General, Selective and Delayed RCDs A, AC and B, F & RDC-DDs
- Measurement of Voltage, Current, Active Reactive, Apparent Power
- Measurement of Cosphi, Power Factor
- Optional adapters for measuring PQA, Earth Leakage, Lux & Temperature
- Memory 999 Locations, 3 Level Markers
- PC interface integrated WiFi communication
- Software Included

See MFT-PRO+ EV Kits Pages 11 & 12

For Video Demonstration
CLICK HERE

(Supplied with TIS ERKIT)

GENERAL CHARACTERISTICS

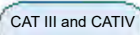
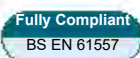
Power Supply: 6 x 2000mA Rechargeable Batteries & Charger
Battery Life: > 550 test
Display: Resistive touch screen, colour LCD resolution 320x240 pxl
Memory: 999 locations, 3 levels of markers
PC Interface: optical/USB and WiFi
Safety: IEC/EN61010-1, double insulation
Operating Humidity: <80%RH
Operating Temperature: 0 ÷ 40°C
Storage Humidity: <80%RH
Storage Temperature: -10 ÷ 60°C
Measurement Category: CAT IV 300V, Max 415V between inputs
Pollution Level: 2
Reference Standard: IEC/EN61557-1-2-3-4-5-6-7
Size (LxWxH): 225 x 165 x 75 mm
Weight (inc. batteries): 1.2 kg
Accessories (Supplied): Neck Strap with Harness

CARRIES OUT (Important Extracts from BS7671 : 2018, IET 18th Edition)

- Harmonic Current Measurements
- Power Factor Measurements in line with chapter 33, 331.1 page 51 BS7671 : 2018 (IET 18th Edition)
- Voltage Drop Measurements
- Power Factor V, A, Hz, kW, kVA, COS ϕ and PF as recommendation in Appendix 17

*Energy Efficiency, Page 513 BS7671 : 2018 (IET 18th Edition)

*Provided the instrument is calibrated by TIS/TIC in year 2 and 3. This also includes free software updates.



HT ANALYSIS APP



Thanks to the brand new HT Analysis App which is free to download for IOS and Android systems, the unit is capable of transferring measured and recorded data onto smart phones or tablets. This provides the operator the possibility to customise and share through HT Cloud the results and information of the tests, producing a complete solution to your testing needs.

Accurate and easy to use nulling of all your test leads, power quality analysis, harmonics to the 25th, full help schematic colour display, resistive touch screen works even with gloves on. Fully compliant with BS EN 61557, BS 7671 17th and 18th Editions of the IET Regulations, plus much more!



NECK STRAP
WITH HARNESS
(SUPPLIED)



*TIS ERKIT
EARTH
ELECTRODE KIT
(SUPPLIED WITH
MFT-PRO+)*



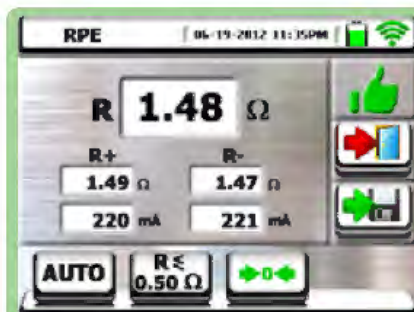
TIS EV-TEST100
(optional extra)



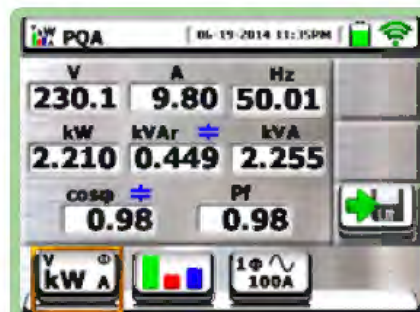
PR400
(optional extra)



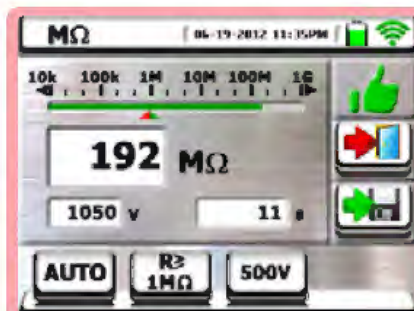
HT96U
(optional extra)



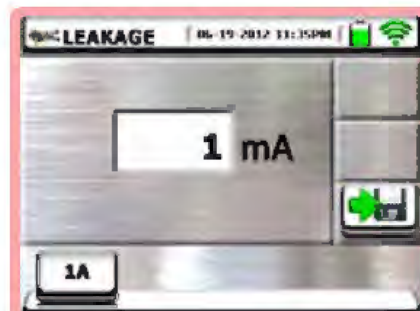
Outcome of Continuity Test with actual result and current injected



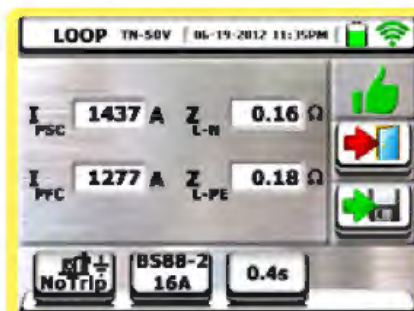
Complete set of test results having conducted a Power Quality Analysis



Outcome of an Insulation Test showing passed result



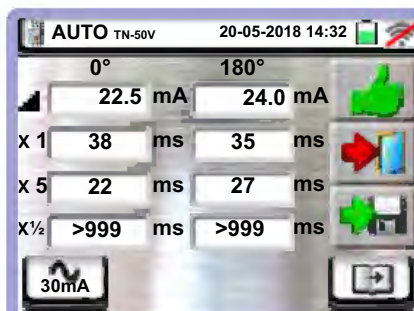
Results from Earth Leakage Test carried out using the optional clamp adapter as featured on the back cover of this brochure



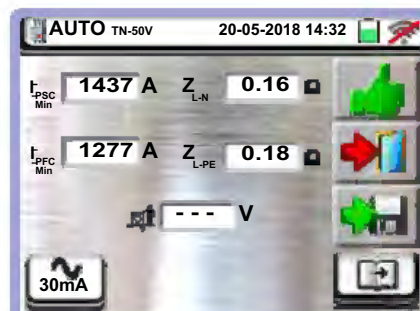
Outcome of No Trip Loop Test displaying Z L-N, Z L-PE Results and IPSC & IPFC results



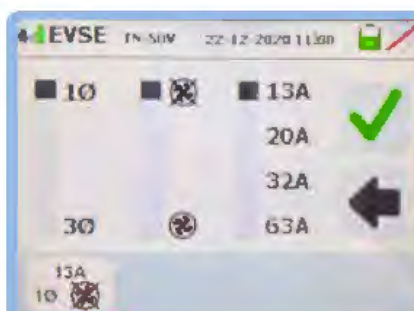
Temperature measurement taken using the optional temperature adapter



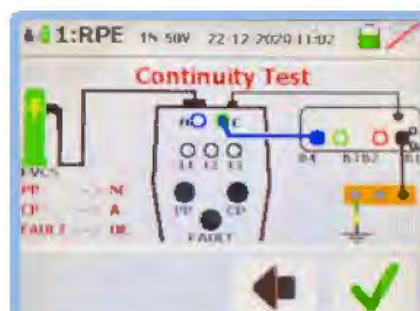
Outcome of Auto RCD Test
showing x1, x5, x $\frac{1}{2}$, 0° and 180°



Allows you to perform No Trip Loop Test, Ramp Test, Auto RCD Test (30mA) and both cycles of Ramp Test. From pressing the test button once. Results shown are from the No Trip Loop Test which show L, N, PE, RSC and RSC



Outcome of EVSE Pod Set up screen



Outcome of EVSE Continuity Auto Sequence Set up screen

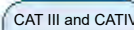
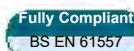
MFT - PRO



**Professional TRMS Multifunction Installation Tester
with Power Quality Analysis, Wi-Fi & EVSE Testing Capabilities**

SPECIAL FUNCTIONS

- NEW EVSE Testing Capabilities, Full Auto-Sequence using TIS EV-TEST100 See MFT-PRO EV Kits
Pages 11 & 12
- NEW 6mA Type B, DC RCD & Ramp Test for EVSE Charging Stations
- NEW Auto Sequence performs Loop, RCD & both cycles of the Ramp Test from pressing the test button once
- NEW RDC-DD 6mA Test to IEC 62955 for EVSE Testing
- TFT Large Colour LCD Display, 320 x 240 pixels
- Phase to Phase Loop Testing
- TRMS for accurate measurements on noisy and distorted circuits
- Resistive Touch Screen, works even with gloves on!
- Full Help Schematic Display
- Built in Fuse Characteristic Table, ✓ OK and ✗ Fail Display
- Measurement of Continuity > 200mA
- Supplied with Neck Strap & Harness for Hands Free Use
- Displays both L-N, L-PE with PFC & PSC Simultaneously on No Trip Test
- Compliant with BSEN 61557-1-2-3-4-5-6-7 17th Amendment 3 & 18th Edition
- Accurate PRO-LOCK No Trip Loop Test
- Phase Sequence Measurement
- Accurate and Reliable, 'No Trip' Loop Testing
- Line / Loop Impedance, Phase - Phase
- Phase - Neutral, Phase - PE
- Insulation Test at 50, 100, 250, 500 and 1000V
- RCD Testing up to 1A, or 10A with optional adapter
- Automatic RCD Test, 0° 180°, x1 x5 x½, Contact Voltage
- Ramp Test in one visit
- Tripping time of General, Selective and Delayed RCDs A, AC and B, F & RDC-DDs
- Measurement of Voltage, Current, Active Reactive, Apparent Power
- Measurement of Cosphi, Power Factor
- Optional adapters for measuring PQA, Earth Leakage, Lux & Temperature
- Memory 999 Locations, 3 Level Markers
- PC interface integrated WiFi communication
- Software Included



For Video Demonstration
CLICK HERE

GENERAL CHARACTERISTICS

Power Supply: 6 x 2000mA Rechargeable Batteries & Charger
Battery Life: > 550 test
Display: Resistive touch screen, colour LCD resolution 320x240 pxl
Memory: 999 locations, 3 levels of markers
PC Interface: optical/USB and WiFi
Safety: IEC/EN61010-1, double insulation
Operating Humidity: <80%RH
Operating Temperature: 0 ÷ 40°C
Storage Humidity: <80%RH
Storage Temperature: -10 ÷ 60°C
Measurement Category: CAT IV 300V, Max 415V between inputs
Pollution Level: 2
Reference Standard: IEC/EN61557-1-2-3-4-5-6-7
Size (LxWxH): 225 x 165 x 75 mm
Weight (inc. batteries): 1.2 kg
Accessories (Supplied): Neck Strap with Harness

HT ANALYSIS APP



Thanks to the brand new HT Analysis App which is free to download for IOS and Android systems, the unit is capable of transferring measured and recorded data onto smart phones or tablets. This provides the operator the possibility to customise and share through HT Cloud the results and information of the tests, producing a complete solution to your testing needs.

CARRIES OUT (Important Extracts from BS7671 : 2018, IET 18th Edition)

- Harmonic Current Measurements
- Power Factor Measurements in line with chapter 33, 331.1 page 51 BS7671 : 2018 (IET 18th Edition)
- Voltage Drop Measurements
- Power Factor V, A, Hz, kW, kVAr, kVa, COS ϕ and PF as recommendation in Appendix 17

*Energy Efficiency, Page 513 BS7671 : 2018 (IET 18th Edition)

* Provided the instrument is calibrated by TIS/TIC in year 2 and 3. This also includes free software updates.

MFT - PRO

Professional TRMS Multifunction Installation Tester
with Power Quality Analysis, Wi-Fi & EVSE Testing Capabilities

At last, a true 'All in One' Tester for the professional electrician with phase to phase loop testing, a large TFT colour LCD display, Trms for accurate measurements on noisy and distorted circuits. Auto mode allows loop PE, PN, PSC, PFC, RCD 0°, 180° x ½ x 1 x 5 and both cycles of the ramp test from one connection and one press of the text button, accurate pro-lock, no-trip testing.

Accurate and easy to use nulling of all your test leads, power quality analysis, harmonics to the 25th, full help schematic colour display, resistive touch screen works even with gloves on. Fully compliant with BS EN 61557, BS 7671 17th and 18th Editions of the IET Regulations, plus much more!



NECK STRAP
WITH HARNESS
(SUPPLIED)



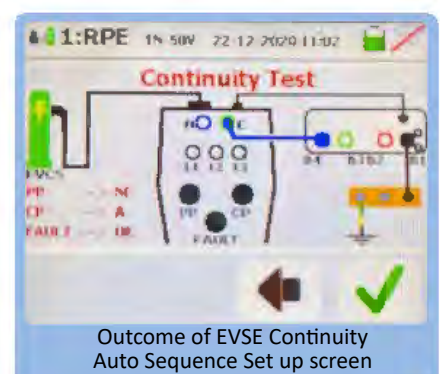
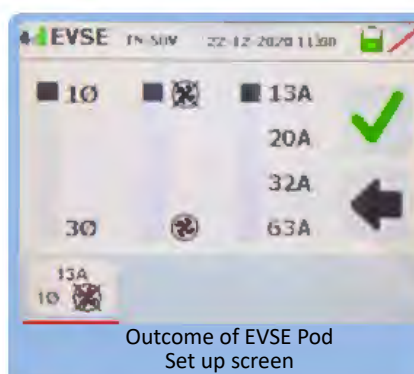
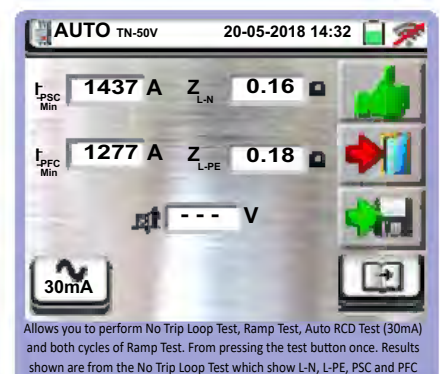
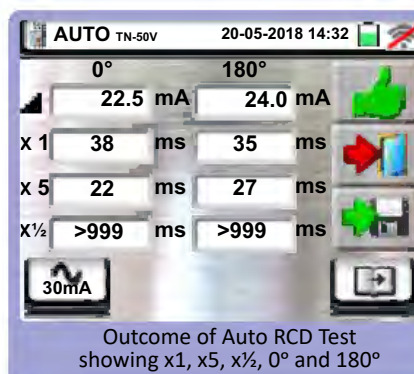
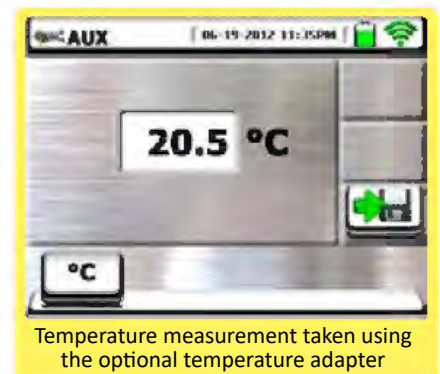
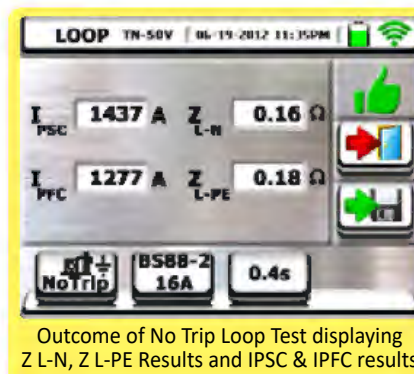
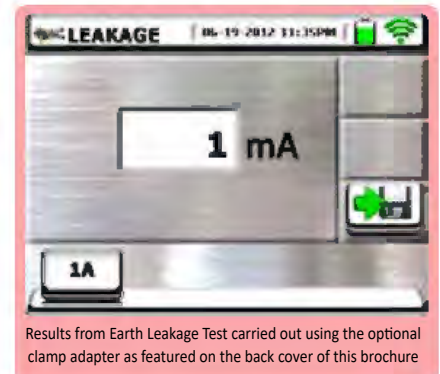
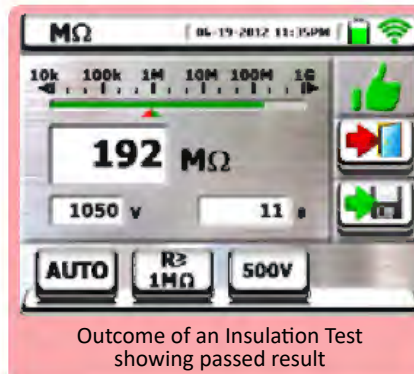
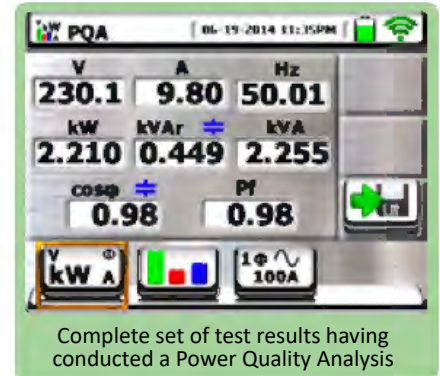
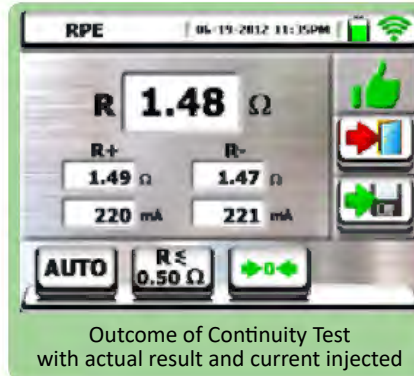
TIS EV-TEST100
(optional extra)



PR400
(optional extra)



HT96U
(optional extra)





For Video Demonstration
[CLICK HERE](#)



TIS EV-TEST100
 (optional extra)

SPECIAL FUNCTIONS

- **NEW** 6mA Type B, DC RCD & Ramp Test for EVSE Charging Stations
- **NEW** RDC-DD 6mA Test to IEC 62955 for EVSE Testing
- RDC-DD is (Residual Direct Current Detecting Device)
- 2* and 3 Wire Loop Test (*European patent pending)
- Automatic Testing of 3 Insulation Tests from one connection
- TRMS for accurate measurements on noisy and distorted circuits
- LPE/LN with PFC/PSC results displayed on single test
- New Auto Start Mode, On or Off for easy testing
- Dual Test Button for Left or Right hand use
- Neck Strap and Safety Harness
- Built in Fuse Characteristic Table, ✓ OK and ✗ Fail Display
- Accurate and Reliable 'No Trip' Testing, Line / Loop Impedance Phase - Phase, Phase - Neutral, Phase - PE with 2 Wire Mode
- Phase to Phase Loop Test
- Full Help Schematic Display
- Large COG Graphic LCD Display 128 x 128 pixels
- Compliant with BSEN 61557-1-2-3-4-5-6-7, 18th Edition
- RCD Testing 6mA to 1A
- Fast Automatic RCD Test, 0° 180° x 1 x 5 x ½ with Ramp & Contact Voltage Tests
- Auto Mode Loop and RCD Tests in a single test
- Tripping of General, Selective RCDs A, AC, B, F & RDC-DDs
- Continuity Test of Earth Conductors with Test Current >200mA
- Phase Sequence Measurement
- Insulation Test at 50, 100, 250, 500 and 1000V DC
- Safety Compliance with IEC EN 61010-1
- Built in Pass / Fail Levels
- Measurement Category CAT IV 300V

See MFT-ECO EV Kit
 Pages 12



SUPPLIED WITH

- Neck Strap and Safety Harness
- PR400 Remote Switch
- Test Leads, Probes and Crocodile Clips
- 6 x 2000mA Rechargeable Batteries & Charger
- Soft Padded Carrying Case
- 12 Month Calibration Certificate
- Guarantee upgradeable to 3 years



* Provided the instrument is calibrated by TIS/TIC in year 2 and 3. This also includes free software updates.



The TIS 1835 Digital Insulation Tester meets all the requirements of the 18th Edition and is packed full of features which are listed below and includes all the features of a digital multimeter and a high end digital insulation tester, with 0.01 of an ohm at 200mA.

SPECIAL FUNCTIONS

- Insulation Range 50, 100, 250, 500 & 1000 Volt, (Stepping 10%)
- 99 - Group Data Storage
- Measuring Range 50MΩ up to 20.0GΩ
- With 0.01 of an ohm at 200mA
- High Voltage Output Alarm
- Continuity R1 R2 Testing 20.00KΩ, >200mA with Buzzer
- TRMS
- AC Voltage Range 0 - 600V, 0.1V ± 2% + 3
- DC Voltage Range 0 - 600V, 0.1V ± 2% + 3
- DAR + P1 / Timing Measurement
- Frequency DC 50Hz - 400Hz
- Step Voltage
- Compliance Standards EN61557-1-2007, EN61557-2-2007, EN61557-4-2007
- Compliance Standards EN61326-1-2013, EN61326-2-2-2013, EN61010-2-030-2010
- Compliance Standards EN61010-2-033-2012 and IET 18th Edition
- Display with Max Reading being 9999
- Data Hold
- Low Battery Alarm
- Analogue Bar Graph
- CAT IV 600V
- Battery Life Expected on new set of Alkaline Batteries 800 Insulation Tests
- Uses 6 x AA, 1.5V Batteries
- Automatic Discharge of Voltage
- Back Lit Display
- Lock Timer Feature
- Complete with Test Leads, Alligator Clip, Batteries & Padded Case



EN: 61010-1
CAT III 1000V

EN: 61010-1
CAT IV 600V

For Video Demonstration
[CLICK HERE](#)



TIS CHECKBOX

Calibration Checkbox

The TIS Checkbox is a very useful tester which ensures on a weekly, monthly basis that all your multifunction testers or individual loop, RCD, insulation and continuity testers are within specification. This unit does not replace your annual calibration procedures.

CALIBRATION CHECKS ON

- All types and makes of Multifunction Tester
- All types and makes of separate Loop, RCD & Insulation / Continuity Tester
- Checks Continuity 0 - 10Ω
- Checks Insulation Resistance 1 - 200Ω
- RCD Test checks at 30mA and 150mA
- Checks Loop at socket +0.50Ω, +2.00Ω and 50Ω
- Can be used to check Voltage & Resistance on Multimeters
- Easy to Use
- Compact Design
- Complete with Padded Case



CE EMC & LVD
EN: 61010-1

COMPLETE WITH
Calibration Certificate

COMPLIANT WITH
BSEN 61326

For Video Demonstration
[CLICK HERE](#)



"Please note a Checkbox does not replace your annual Calibration Certificate"



HT96U Power Harmonic & Leakage Clampmeter For the MFTPRO+ & MFTPRO

MAIN FEATURES

- Measuring range: 1mA÷1000A
- Basic Precision: $\pm 1.0\%$ reading
- Measurement Catagory: CAT III 600V
- Clamp jaw internal diameter: 54mm
- Output connector: Hypertac



PR400 Remote Test Probe For The MFTPRO+, MFTPRO & MFTECO

MAIN FEATURES

- Overall length: 25cm
- Tip length: 1.9cm
- Tip diameter: 4mm
- Measurement category: CAT IV 600V / CAT III 1000V



TIS 173DB Distribution Board Lead Set with Probes and Crocodile Clips

The TIS 173DB is a rugged constructed distribution board lead set, constructed with silicone cable, making it extremely flexible, the set comes complete with probes and rugged strong crocodile clips and is fitted with standard 4mm terminals making it suitable for our own MFT-PRO, MFT-PRO+ & MFT-ECO, plus most other test instrumentation, no matter what manufacturer.



TIS 172ML Universal Mains Lead

The TIS 172ML is a universal mains lead that can be used with most multifunction testers and our own MFT-PRO, MFT-PRO+ & MFT-ECO.



TIS ERKIT 3 & 4 Pole Earth Electrode Kit

This Kit can be used with the MFT-PRO+ for 3 & 4 Pole Earth Electrode Testing.



TIS 50 50M Earth Wander Reel

The 50m earth wander reel is to enable performance of r2 testing and is easy to use, on a quick and simple rewindable reel it has a 4mm terminal to fit the majority of test equipment no matter what manufacturer.



TIS JUMPTL Jump Leads with Crocodile Clips

Ideal for use when carrying out insulation testing or continuity testing at a distribution board.
Length of leads: 2 x 170mm & 2 x 450mm.



TIS LIGHTAD Lamp Adapters

The TIS LIGHTAD Lamp Adapters are ideal for all types of lamp holder connectors, enabling simple and easy testing of all lighting circuits.



MFT-PRO+ - EV ULTIMATE

Ultimate Professional TRMS Multifunction EVSE Test Kit with Earth Electrode Capabilities

Please refer to pages 4 & 5 for the full specifications of the TIS MFT-PRO+.

The Ultimate kit comes complete with the HT96U Power Harmonic & Leakage Clampmeter & PR400 Remote Testing Probe.



*EVSE Test Report Pad
also available (page 13)*



*EVSE Specific Installation
Certificate Pad
also available (page 13)*

MFT-PRO - EV ULTIMATE

Ultimate Professional TRMS Multifunction EVSE Test Kit

Please refer to pages 6 & 7 for the full specifications of the TIS MFT-PRO.

The Ultimate kit comes complete with the HT96U Power Harmonic & Leakage Clampmeter & PR400 Remote Testing Probe.



MFT-PRO+ - EV Complete EV Testing Kit with Earth Electrode Kit

Please see individual functions of:
The MFT-PRO+ on pages 4 & 5
& TIS EV-TEST100 on page 13



EVSE Test Report Pad
also available (page 13)



EVSE Specific Installation
Certificate Pad
also available (page 13)



(Supplied with TIS ERKIT)



Both Products can be purchased separately

MFT-PRO - EV Complete EV Testing Kit

Please see individual functions of:
The MFT-PRO on pages 6 & 7
& TIS EV-TEST100 on page 13



For Video Demonstration
[CLICK HERE](#)



EVSE Test Report Pad
also available (page 13)



EVSE Specific Installation
Certificate Pad
also available (page 13)



* MFT-PRO only

Both Products can be purchased separately

MFT-ECO - EV Complete EV Testing Kit

Please see individual functions of:
The MFT-ECO on page 8
& TIS EV-TEST100 on page 13

For Video Demonstration
[CLICK HERE](#)



EVSE Test Report Pad
also available (page 13)



EVSE Specific Installation
Certificate Pad
also available (page 13)



Both Products can be purchased separately

TIS EV-TEST100 EV Testing Adapter



* Provided the instrument is calibrated by TIS/TIC in year 1 and 2. This also includes free software updates.

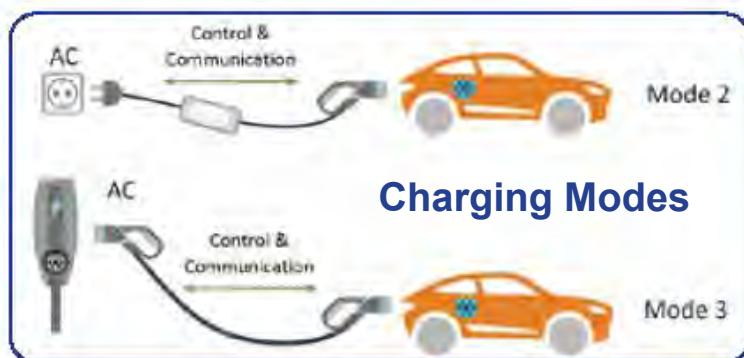
** When used as part of MFT-PRO - EV Kit

For Fully Automated Results please use in conjunction with:
The MFT-PRO & MFT-PRO+

For Manual Results please use in conjunction with:
The MFT-ECO

MAIN FEATURES

- Tests Mode 2 and Mode 3 Charging Stations
- Tests Type A-30mA, B-6mA and B-30mA RCDs
- CAT III 300V Measurement Category
- Fault Simulation (PE and E)
- Phase Presence Indication
- Type 2 Connection
- IP40 Protection
- Data Saving using the TIS MFT-PRO & MFT-PRO+
- Data Export using the Top View Software
- External Load - Fused Max 10A/230V
- Vehicle Status Simulation (CP) A,B,C,D
- Guided AUTO Test Sequence using the TIS MFT PRO & MFT-PRO+
- Cable Coding Simulation (PP) Open, 13A, 20A, 32A and 63A
- Standards, IEC/EN61010-1, IEC/EN61851-1 and IEC/EN60364-7-722
- The TIS EV-TEST100 can be used with Most Multi Function Testers



TIS 2907 Dedicated EVSE Installation Certificate Book

The new single signature Electrical Installation Certificate for a single circuit supplying an electric vehicle charging point, conforms to Appendix 6 of 857671: 2018+ A2, suitable for Single Phase and Three Phase properties.



TIS 1908 EVSE Test Report Certificate Book

The TIS 1908 is an EVSE test report pad ideal for use when testing and recording results on an EVSE charging station and is perfect to use with the TIS MFT-PRO+, TIS MFT-PRO & TIS MFT-ECO in conjunction with the TIS EV-TEST100.



PVCHECKS-PRO is a one-stop test solution to meet the IEC 62446-1 standards for category 1 tests. PVCHECKS-PRO performs on single-face (SF) as well as on bifacial (BF) photovoltaic systems all tests required by the IEC 62446-1 to commission a photovoltaic installation in automatic sequence. Therefore, by a single GO-key stroke PVCHECKS-PRO measures and tests:

- continuity of protective earthing and/or equipotential bonding conductors, where fitted;
- polarity test;
- string open-circuit voltage test up to 1500V;
- string short-circuit current test up to 40A;
- insulation resistance of the DC circuits by generating up to 1500V even on live circuits.

MAIN FEATURES

- Continuity of protective conductors at 200mA
- Polarity
- Open circuit voltage (Voc) of PV modules and strings: 1500V
- Short circuit current (Isc) on PV modules and strings: 40 Amp
- PV string / field insulation with test voltages: 250V, 500V, 1000V & 1500V DC
- Use of SOLAR-03 remote unit with Bluetooth connection
- Measurement of direct (front side) irradiation with reference cell (with optional SOLAR-03 remote unit)
- Temperature measurement of cell and environment (with optional SOLAR-03 remote unit)
- Measurement of polarisation index (P.I)
- Dielectric absorption ratio (D.A.R)
- GFL function to locate the fault position in the string
- CAT III 1000V AC, CAT III 1500V DC Measurement category
- Backlit LCD display
- Internal memory: 999 locations
- Integrated Wi-fi connection and compatibility with HTANALYSIS App
- Optical / USB serial port for PC connection
- Custom management of internal PV module database
- Auto power off
- Help on line on the display
- Size (LxWxH): 235 x 165 x 75mm
- Weight (batteries included): 1200 grams

OPTIONAL EXTRAS

- YABAT0004001 - External battery charger
- SOLAR-03 - Remote unit for measurement of irradiance, temperature & inclination of PV Modules
- PT1000 - Probe for cell temperature measurement
- HT305 - Irradiance measurement cell complete with bracket and fixing screws
- KITPVPROEXT20- Set of 2 banana cables 4mm, Green/ Black 20 Metres



SOLAR-03
(optional extra)

PV-PRO is the most advanced multifunction PV tester ever developed, being the combination of an I-V curve tracer meeting IEC 60891, and a commissioning tester meeting the IEC 62446-1 standards. PV-PRO is a one-stop test solution to take category 1 and category 2 commissioning tests, to measure the performance and functionality, and to troubleshoot single face and bifacial modules in PV systems.



MAIN FEATURES

- Continuity of protective conductors at 200mA
- Polarity
- PV Module type- all most common types of PV modules single face & bifacial
- Wireless environmental parameters measurement (free field, max 100m, bluetooth connection with SOLAR-03)
- Performance / acceptance tests @ OPC (operating conditions) I-V Curve
- Open circuit voltage (Voc) of PV modules and strings: 1500V
- Short circuit current (Isc) on PV modules and strings: 40 Amp
- PV string / field insulation with test voltages: 250V, 500V, 1000V & 1500V DC
- GFL function to locate the fault position in the string
- Insulation measurement (dual mode & timer)
- PV Module datasheet database: 40,000 internal
- Memory: 9999 tests
- Data transfer / communication port: USB-C & Wi-fi
- Touch screen colour graphic LCD: 800 x 600 pixel
- Help on line display
- IP67 (closed) IP40 (open)
- Buzzer

PVCHECKS ULTIMATE

ULTIMATE Multifunction Commissioning Tester for Solar PV

Complete with SOLAR-02 Irradiance Meter & HT304X Reference Cell

See below and page 17 opposite for full specification of the PVCHECKS.

Please refer to page 26 for the full specifications of the SOLAR-02 & HT304X.



PVCHECKS

Multifunction Commissioning Tester For Solar PV



MAIN FEATURES

- Continuity of protective conductors at 200mA
- Insulation measurement with test voltage: 250V, 500V & 1000V DC
- Open circuit voltage (VOC) measurement up to 1000V DC
- Short circuit current (ISC) measurement up to 15A DC
- DC voltage, DC current & DC power measurement
- Measurement of irradiation through reference cell HT304X (optional extra)
- Environmental and photovoltaic module temperature measurement through PT300N probe (optional extra)
- Use of compensation relationships Cells / Environmental on PDC
- Measurements always compared to the values declared by the modules manufacturer
- Internal database for managing up to 30 PV modules (30,000 modules by software)
- Test measurement of string operation
- Mechanical inclinometer for verifying the correct inclination of sun rays
- Result for every measurement: OK/NO
- Internal memory and USB output for PC connection
- Help on line on the display
- Efficiency measurement of the PV field (DC side)
- Display: 128 x 128 pixel with backlight
- Auto power off after 5 minutes
- Internal memory: 256k Bytes
- Size (LxHxW) 235 x 165 x 75mm
- Weight (batteries included): 1.2kg

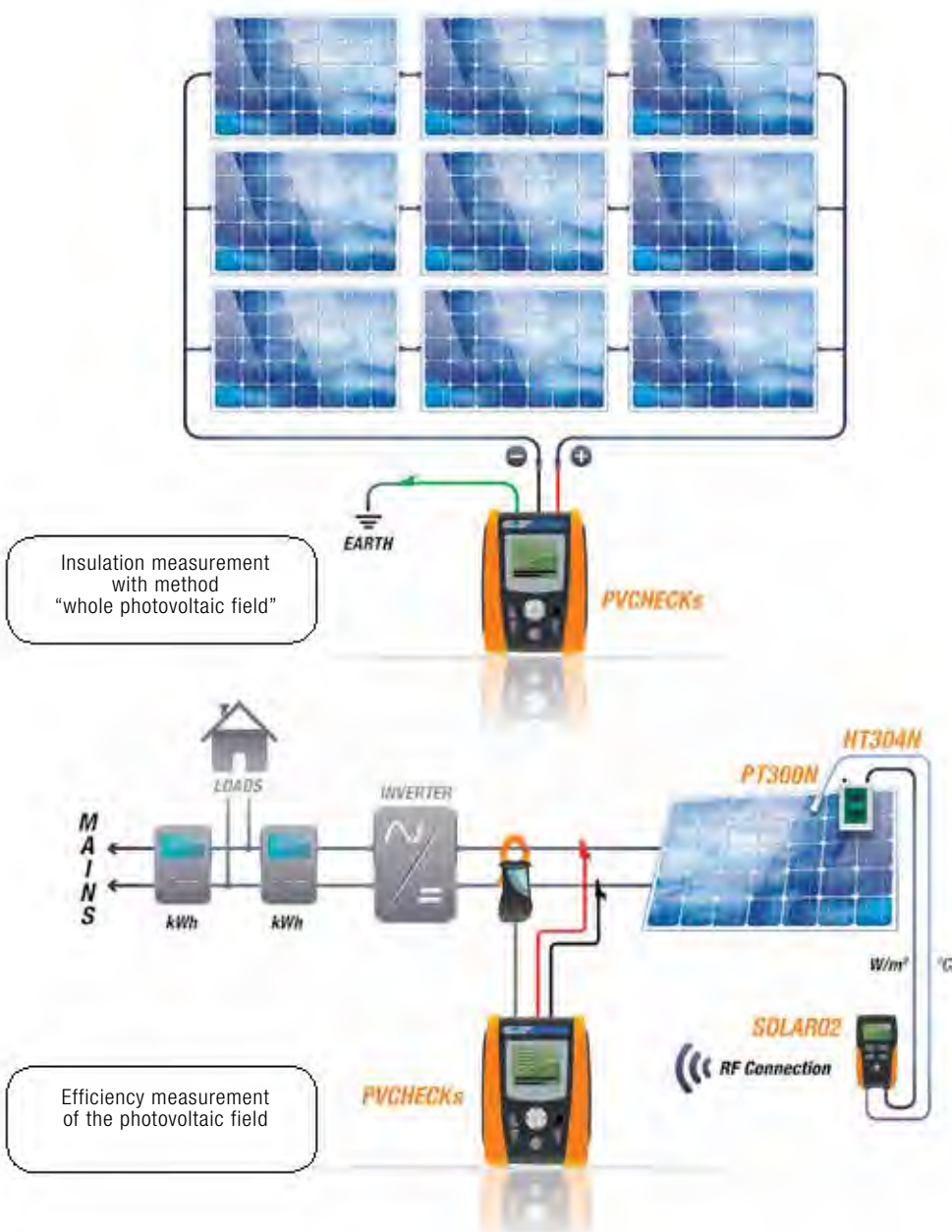
The multifunction device PVCHECKs allows quickly and safely carrying out the commissioning tests provided for a PV system (section in DC) and the functional test of modules/strings the system consists of according to the requirements of Standard IEC/EN62446. When testing safety, PVCHECKs is a real innovation, since it is capable of measuring insulation of a module, string or of a whole photovoltaic field (IEC/EN62446) with no need to use an external switch to short-circuit the positive and negative terminals.

PVCHECKs also allows checking the functionality of the connections and of the strings in a photovoltaic field, according to the provisions of standard IEC/EN62446 by measuring the open circuit voltage and the short-circuit current at operating conditions (OPC) and referred to STC (via the optional measurement of irradiation, also with the use of optional accessories SOLAR02 and HT304N), providing an immediate result as regards the measurement just carried out, both in absolute terms and by comparison with the previously tested strings.

Finally, PVCHECKs also allows analyzing the performance of the photovoltaic field (DC) under operating conditions (therefore connected to the inverter) with the use of optional accessories SOLAR02 and HT304N, providing an indication of the generated power and of the performance of the field itself.

OPTIONAL ACCESSORIES

- PT300N Temperature probe
- SOLAR-02 Remote unit for irradiation / temperature measurement
- HT304N Reference cell for irradiation measurement
- M304 Mechanical inclinometer
- SP-0400 Shoulder strap to use the device with free hands
- KITPVEXT25M Set of 2 banana cables 4mm, Green / Black 25 Metres
- 606-IECN Connectors with magnetic terminals



12/06/09	14:52:45	
RPE max	2	LI
Rcal	0.07	LI
Rpe	0.23	LI
Isc	210	mA
Outcome: OK		
Selection LOW		

Continuity test result with 200mA OK

12/06/09	14:52:45	
RPE max	2	LI
Rcal	0.07	LI
Rpe	> 200	LI
Isc	0	mA
Outcome: NO		
Selection LOW		

Continuity test result with 200mA NOT OK

12/06/09	14:52:45	
Ins Test	1000	V
Ri min	1.0	MΩ
Mode	Field	
Vtest	1025 V	1020 V
Ri (+)	> 100	MΩ
Ri (-)	> 100	MΩ
Rp	69	MΩ
Outcome: OK		
Selection MO		

Insulation measurement result at 1000V OK

12/06/09	14:52:45	
Module	SUNPOWER210	
Voc	548.0	V
Irr	0	W/m ²
Ta	Auto	°C
Voc (sc)		OK
Ri (1000V)	116	MΩ OK
Rpe (Cal)	2.00	OK
Outcome: OK		
Selection IVCK		

Automatic sequence test result OK

PV-ISOTEST Multifunction For Checking Electrical Safety & Performance Of A Photovoltaic System

PV-ISOTEST represents a real innovation in the panorama of PV verification and testing instrumentation. PV-ISOTEST measures the insulation resistance of a single module, a string or even an entire photovoltaic field up to 1,500 V DC according to IEC/EN62446 standard.

Traditional insulation meters would require a DC-rated switch-box to short-circuit the positive and negative terminals of the module/string/ PV field under test. With the PV-ISOTEST the use of any external device is not required, PV-ISOTEST carries out the measurements in full autonomy and self-sufficiency.

In addition, through the new GFL (Ground Fault Locator) function, PV-ISOTEST indicates the position of any poor insulation on a string of the photovoltaic system, due, for example, to water or humidity leakage.



For Video Demonstration

[CLICK HERE](#)

MAIN FEATURES

- TRMS AC voltage measurement: 1000V
- DC voltage measurement: 1500V
- Insulation resistance: 250V, 500V, 1000V & 1500V DC
- GFL function to locate the fault position in the string
- Measurement of polarization index (P.I)
- Dielectric absorption ratio (D.A.R)
- Continuity of protective conductors at 200mA
- Size (LxWxH): 235 x 165 x 75mm
- CAT III 1500V DC / CAT III 1000V AC
- Weight: 1.2kg

SOLAR I-Ve allows both testing a single-phase photovoltaic system and verifying I-V curve. Thanks to remote unit SOLAR02, it is possible to test the system complying with the requirement of simultaneity as provided for by the reference standard. SOLAR02 is a datalogger which, synchronized with SOLAR I-Ve, acquires the data relevant to irradiation and temperature while tests carried out by SOLAR I-Ve are carried out.

For measuring I-V curve, SOLAR I-Ve manages an internal database of the modules, which can be updated at any time by the user by comparing the measured data with the rated values, thus allowing the immediate evaluation whether the string or the module fulfills the efficiency parameters declared by the manufacturer.

Current and voltage measurement at modules/strings output is measured with the 4-terminal method, which allows extending possible measuring cables without considering any compensation of their resistance, thus obtaining always precise measurements. At the end of the test, the display of I-V curve on the screen is a clear indication about the compliance with the specifications declared by the panel manufacturer.



MAIN FEATURES

- I-V Curve tracing of PV modules and strings: 128 points
- Measuring range of I-V Curve / VOC & ISC:
1500V -10A & 1000V - 15A
- Quick IVCK test for measuring VOC & ISC on PV modules and strings
- Single phase / three phase PV systems
- Measurement of direct (front side) irradiation and reference cell
- Use of remote unit SOLAR-02 with USB / RF connection
- Temperature measurement of cell and environment
- Active P, Reactive Q, Apparent S Power/ Energy
- Max number of simultaneously selectable parameters: 9
- Recording with selectable integration periods: 5s - 60m
- Indicative memory duration:
(in days @PI = 10min @ max number of parameters) 8
- Summary table of main electric parameters
- Measuring range for PV testing 1500V DC / 265 V AC (single phase)
- CAT III 300V
- Backlit display
- Internal memory: 249 curves I-V 8 days @ PI=10min
- Provided PC interface with software for windows
- Integrated Wi-fi connection and compatibility with HTANALYSIS App
- Custom management of internal PV module database
- Auto power off
- Indication of recording duration for PV testing
- Help on line on display
- Size (LxWxH): 235 x 165 x 75mm
- Weight 1.2kg

I-V600 allows field tracing of I-V curve of modules and strings up to 1500V and 40A. Once traced the I-V curve, thanks to the user updatable database of modules, I-V600 compares the measured data to the nominal values as provided by the manufacturer of the module/string under test to return a clear OK/NOT OK response.

Communication to the remote unit SOLAR-03 is granted up to 100m (in free field), and the logging function in case the communication was impossible (obstacles such as floor, concrete structures, etc.), it is always possible to trace the I-V curve regardless the environment the installation is in.

I-V600 traces the I-V curve of mono-facial and bi-facial modules. According to IEC technical specification TS 60904-1-2, in addition to the front-side radiation, I-V600 measures the back-side radiation by two different sensors (to consider the rear side irradiance non-uniformity).

I-V600 drives up to 3 solar radiation reference cells, but no more tons of parameters to set and high risk of misconfiguration.

I-V600 automatically recognizes the calibration parameters of the reference cells connected.

Running out of battery power is every professional's worst nightmare. Finding yourself without battery power in the middle of nowhere with a job to be delivered within hours would put anyone in trouble. Thanks to the patented BMS (Battery Management System), I-V600 recharges its own batteries by recovering the power absorbed while tracing the I-V curve.

With I-V600 it is possible to reach the PV field with fully flat batteries, start the measuring campaign, and end it with fully charged batteries. BMS turned the worst nightmare into the best dream ever!

Reversing graphics to read the display properly even while hanging the instrument upside-down to the module rails, Wi-Fi connection to smartphones and tablets, and the microSD card slot to expand the memory complete the functions that I-V600 provides.



MAIN FEATURES

- I-V Curve tracing of PV modules and strings: 1500V 40A
- Open circuit voltage VOC of PV modules and strings: 1500V
- Short circuit current ISC on PV modules and strings: 40A
- Quick IVCK test for measuring VOC and ISC on PV modules: 1500V 40A
- Use of SOLAR-03 remote unit with Bluetooth connection
- Measurement of direct (front side) irradiation with reference cell
- Measurement of albedo (back side irradiation) with up to 2 reference cells
- Temperature measurement of cell and environment
- BMS (battery management system) to recover testing energy and recharge the batteries
- Rechargeable or alkaline AA battery powered
- Mains power supply and battery cover
- PV power supply
- Seamless measuring mode to start the curve tracing automatically
- CAT III 1500V DC
- Backlit LCD colour display with touchscreen
- Intuitive memory: 9999 I-V curves
- External memory: micro SD
- PC Interface with software for Windows & Mac
- Integrated Wi-fi for connection to smartphones and tablets
- Auto power off
- Help on line on the display
- Size (LxWxH): 335 x 289 x 155mm
- Weight: 6kg

TIS PV1 Solar Power Meter

The TIS PV1 Solar Power Meter is used to measure solar power. with this unit you can determine the optimal incident angle for solar panels, together with determining the best choice of solar panel. Measurements are displayed in W/m^2 or $\text{BTU (ft}^2 \times \text{h)}$.

SPECIAL FUNCTIONS

- Measuring Range: 4000W/m^2 , $1268\text{ BTU (ft}^2 \times \text{h)}$
- Resolution: 0.1 W/m^2 , $0.1\text{ BTU (ft}^2 \times \text{h)}$
- Accuracy: Typically within $\pm 10\text{W/m}^2$ [$\pm 3\text{ BTU (ft}^2 \times \text{h)}$] or $\pm 5\%$, whichever is greater in sunlight; additional temperature induced error $\pm 0.38\text{ W/m}^2/\text{C}$ [$\pm 0.12\text{ BTU (ft}^2 \times \text{h})/\text{C}$] from 25°C
- Sampling time: Approx. 4 time/second
- Solar radiation measurement
- Solar power research
- Physics and optical laboratories
- Identify high performance windows
- Meteorology
- Simple to use general data
- Measuring the Solar radiation emitted by the sun
- Display units: W/m^2 (Watts per square meter) or BTU
- Data Hold & MAX / MIN functions

GENERAL CHARACTERISTICS

Power: 2 x 1.5V AAA Batteries (supplied)

Weight: 90g

Size: 134mm x 48mm x 27mm



TIS PV2KIT/Elite Elite Solar PV Kit

KIT CONTAINS

- TIS PV1** - please see above for a full list of features
Solar Power Meter
- TIS E257** - please see page 46 for a full list of features
1000A AC/DC TRMS Auto-Ranging Clamp Meter with Inrush Reading
- TIS MC4TL**
MC4 to 4mm Plugs
- TIS 25**
Padded Case with Shoulder Strap

For Video Demonstration
[CLICK HERE](#)



TIS PV2KIT Solar PV Kit

KIT CONTAINS

- TIS PV1** - please see above for a full list of features
Solar Power Meter
- TIS 438** - please see page 48 for a full list of features
1000A AC/DC TRMS Auto-Ranging Clamp Meter with Inrush Reading
- TIS MC4TL**
MC4 to 4mm Plugs
- TIS 25**
Padded Case with Shoulder Strap

For Video Demonstration
[CLICK HERE](#)



I-V500W allows field detection of I-V Curve and of the main characteristic parameters both of a single module and of strings of modules for PV installations up to a maximum of 1500V and 10A or 1000V and 15A.

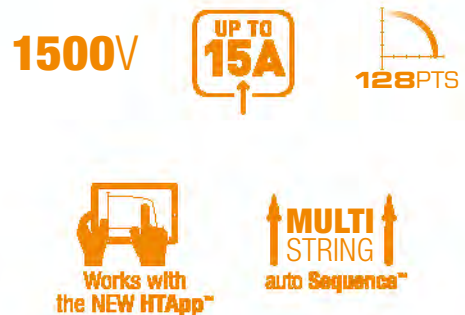
For measuring I-V Curve, I-V500w manages an internal database of the modules, which can be updated at any time by the user and comparison between the measured data with the rated values allows immediately evaluating whether the string or the module fulfills the efficiency parameters declared by the manufacturer.

I-V Curve can be measured also by decentralizing measurement of irradiation and temperature by using the optional remote unit SOLAR02, using the radio frequency connection (RF) with the master unit. Also for I-V500w, the display at the end of the test of I-V Curve is a clear indication about the compliance with the specifications declared by the panel manufacturer.



Why I-V500w?

- **1500V & 15A:** Suitable also for new PV plants with 1500VDC string voltage.
- **Compact, lightweight and On-board screen:** I-V500w needs only one person thanks to the on-board screen and returns immediate test results with OK or NOT OK outcome.
- **Multi-String Auto Start:** Just few seconds to measure, save data and move to next string.
- **Wi-Fi Connection:** Connect your smartphone or tablet to download and analyze in details your measures with exclusive features like Troubleshooting Assistant, Jump function and others available only on the APP HTANALYSIS.



MAIN FEATURES

- I-V Curve tracing of PV modules and strings 1500V / 10A, 1000V / 15A
- Quick IVCK test for measuring VOC and ISC on PV modules VOC 1500V, ISC 15A
- Internal memory 249 I-V Curves
- Use of remote unit SOLAR-02 with USB / RF connection
- Custom management of internal PV module database
- Temperature measurement of cell and environment
- Measurement of direct (front side) irradiation and reference cell
- Summary table of main electric parameters
- Provided PC interface with software for Windows
- Integrated Wi-fi connection and compatibility with HTANALYSIS App
- Backlit LCD display
- Auto power off

Multi-String Auto Start

Dramatically decrease your PV String testing time with the NEW KITKELVIN. **KITKELVIN provides an Auto Sequence function to HT Curve Tracers to reduce testing time up to 75%! KITKELVIN provides 2 leads for a single operator to move from string to string in a combiner box for fast testing.** The Auto-sequence is Start, Acquire, Manual store, Rearm. The Start command is automatically initiated when the operator connects the probes across a string or panel, with Voc triggering the next acquisition sequence.

All that you need is KITKELVIN Test Leads Accessory.



12/07/17 15:34:26			
FLD	STR	MOD	
021	001	134	
022	002	135	
023	003	136	
024	004	137	
025	005	138	
026	006	139	
027	007	140	
028	008	141	
Select	MEM I-V		

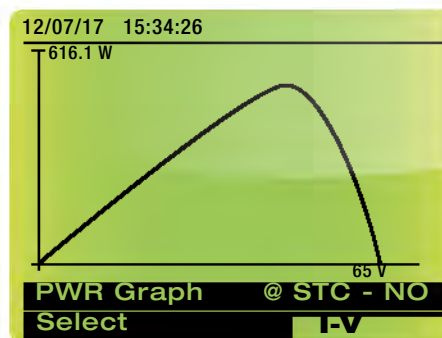
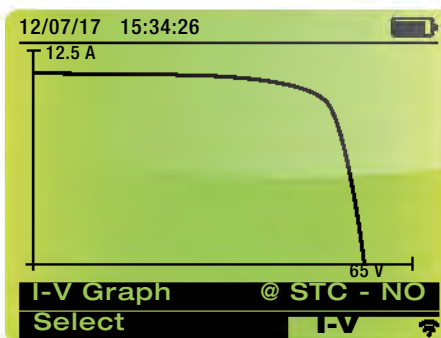
Memory and Module Database

No need for external storage. The Internal Memory can store up to **249 I-V Curves** (128 test points) and up to **999 Quick Checks of Voc & Isc**. The intuitive User Interface (UI) provides easy access to all of your stored data including I-V Curves, power curves and numerical values in the table while in use. To ease measurement set up, HT Solar instruments **store up to 30 modules to ensure you have all panels in the field being tested**. When you get to the field, you are ready to go for the entire day!

Measurement Results (OPC & STC)

The acquired I-V data or the **operating conditions (OPC)** is the **true data acquired during I-V curve test**. Taking the panel characteristics, the environmental measures (Irradiance & Temp) the instrument **transforms these data points (OPC)** to create the **equivalent STC (Standard Test Condition)** curve **to evaluate** if the panel or string is **operating to specification**.

12/07/17 15:34:26			
Voc	65.0	V	
Vmpp	52.9	V	
Imp	10.58	A	
Isc	11.33	A	
Pmax	560	W	
FF	0.76		
DPmax	76.1	%	
Results	@ STC - NO		
Select	I-V		



Report creation with TopView Software

Measuring Solar Field is often only the beginning of your project. Customers want to see proof their fields are working as promised. **HT's Copyrighted Software, TopView makes the business of report generation a breeze.** Easy download, customized naming of data fields, **File storing and sharing through HT Cloud, analyzing capabilities** and **display options to your preference**. You can compare Strings, Combiner boxes even Farms year over year to make describing the state of the field intuitive and obvious. In addition, TopView incorporates standard templates for professional-looking reports customizable with your logo and company information.



I-V400w allows field detection of I-V Curve and of the main characteristic parameters both of a single module and of strings of modules for PV installations up to a maximum of 1000V and 15A.

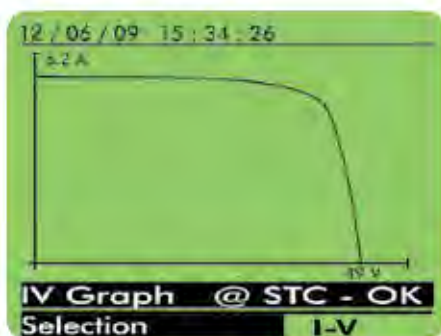
For measuring I-V Curve, I-V400w manages an internal database of the modules, which can be updated at any time by the user and comparison between the measured data with the rated values allows immediately evaluating whether the string or the module fulfills the efficiency parameters declared by the manufacturer.

I-V Curve can be measured also by decentralizing measurement of irradiation and temperature by using the optional remote unit SOLAR02, using the radio frequency connection (RF) with the master unit.

Also for I-V400w, the display at the end of the test of I-V Curve is a clear indication about the compliance with the specifications declared by the panel manufacturer.

MAIN FEATURES

- I-V Curve tracing of PV modules and strings 1000V / 15A
- Quick IVCK test for measuring VOC and ISC on PV modules VOC 1000V, ISC 15A
- Internal memory 249 I-V Curves
- Use of remote unit SOLAR-02 with USB / RF connection
- Custom management of internal PV module database
- Temperature measurement of cell and environment
- Measurement of direct (front side) irradiation and reference cell
- Summary table of main electric parameters
- Provided PC interface with software for Windows
- Integrated Wi-fi connection and compatibility with HTANALYSIS App
- Backlit LCD display
- Auto power off



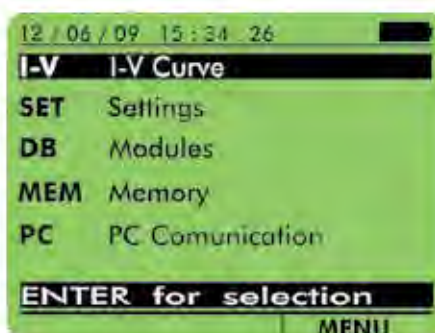
Result of I-V Curve: **OK**



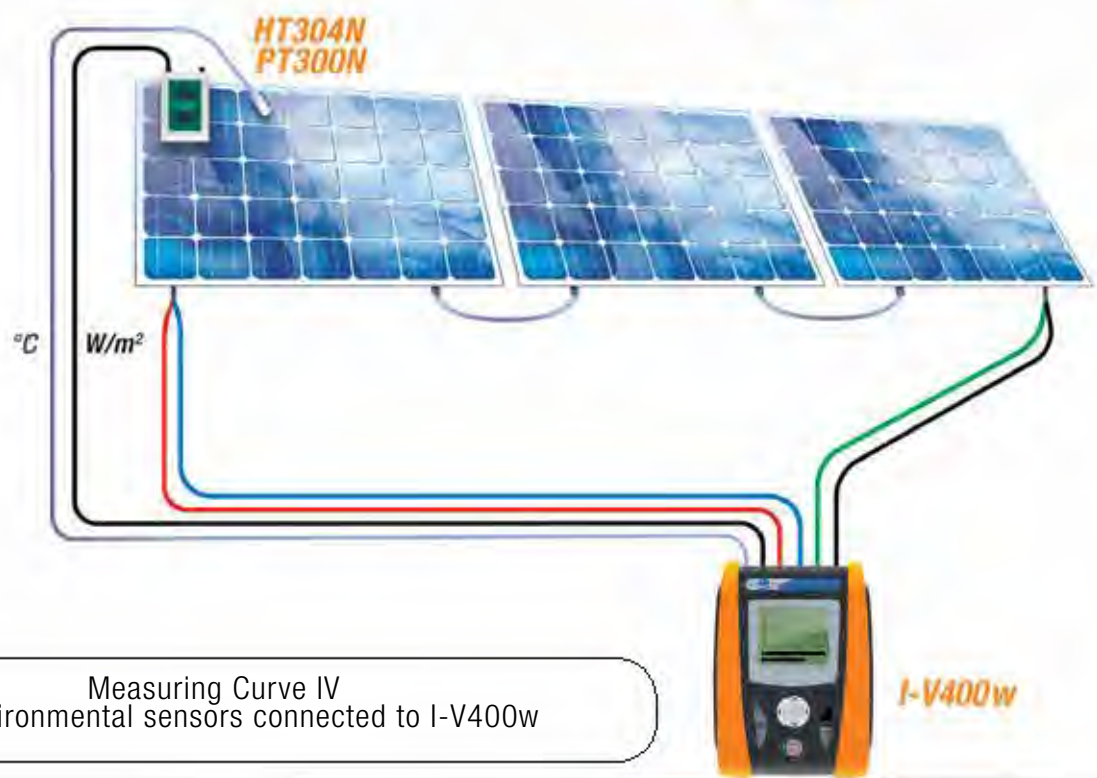
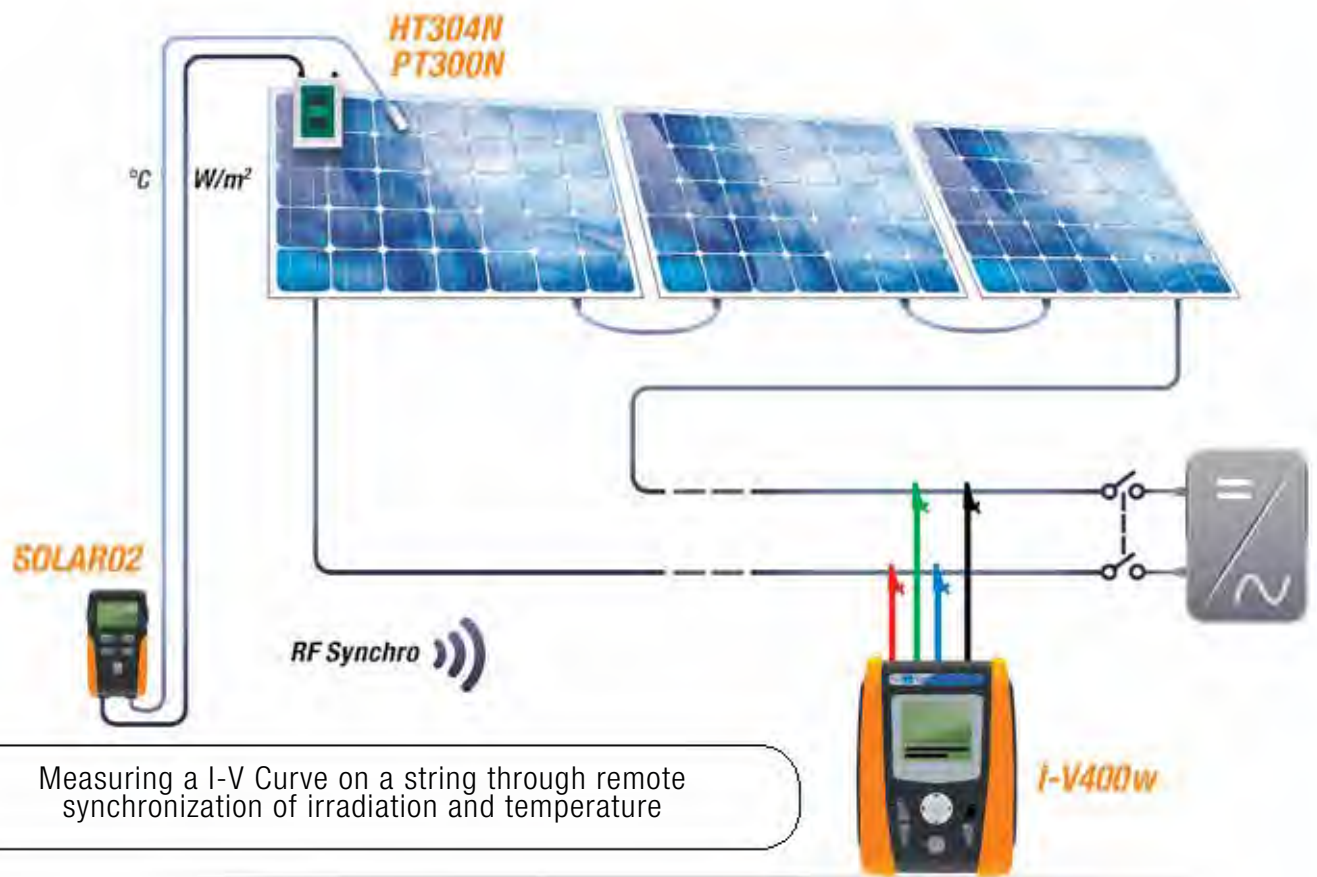
Detail of the single results of I-V Curve: **OK**



Manual insertion of a module



General Menu



HT9025 TRMS AC/DC Current Clampmeter With Data Logger Function

HT9025 has been designed to measure AC/DC current up to 1000A, DC voltage up to 1500V and AC voltage up to 1000V in TRMS reaching CAT IV 600V and CAT III 1000V in compliance with safety standard IEC/ EN61010-1. The clamp is provided with a display with 6000 measuring spots with backlight and bargraph to allow for a simple reading even in poorly lit environments. HT9025 also measures Resistance, Frequency, Capacity and Temperature with K-type probe.

MAIN FEATURES

- TRMS
- Current Measuring Range 1000A
- AC & DC Current
- AC Voltage 1000V
- DC Voltage 1500V
- Leakage Current With Optional Clampmeter
- Frequency
- Resistance & Continuity Test With Buzzer
- Capacitance
- Diode Test
- Duty Cycle
- Temperature With K-Type Probe
- Inrush Current Measurement
- Clamp Diameter 40mm
- Measuring Count 6000
- Backlight
- Bargraph
- Auto Ranging
- Auto Power Off
- Non Contact Voltage Detector
- Data Hold
- Min/Max Function
- Relative Measurement
- Colour LCD Display
- Datalogger & Graph
- Memory Saving
- LI-ION Battery
- CAT IV 600V, CAT III 1000V



SOLAR-02 Remote Unit For Measuring Irradiation, Temperature & Tilt Angle

Communication device to allow the wireless connection of irradiance & temperature probes to the range of HT commissioning, performance & maintenance testers.

MAIN FEATURES

- **Measuring range:** 0÷1400W/m²
- **Basic accuracy:** ± 1.0%reading
- **Internal memory:** approx. 1.5 hours (@ PI master device = 5s)
- **Protection rating:** IP65
- **Size:** 120x65x35mm
- **Weight:** 215g
- **Input connectors:** Hypertac



SOLAR-03 Remote Unit For Measuring Irradiation, Temperature & Tilt Angle

Communication device to allow wireless connection of irradiance & temperature probes to the PVCHECKS PRO, IV600 & PV-PRO range of HT Italia Solar Testers.

MAIN FEATURES

- **Recording:** irradiance and temperature values coupled with Master unit
- **Measurements:** Irradiance (with HT305 cell) and module temperature (with PT305 probe)
- **Power supply:** 2 1.5V AA-type alkaline batteries or 1.2V AA-type NiMH rechargeable batteries
- **Master unit connection:** Bluetooth BLE
- **Output connection:** USB-C for battery charging
- Automatic acquisition of the cell calibration value
- **Basic accuracy:** ± 1.0%reading
- **Type of PV modules:** Single-sided and Double-sided
- **Internal memory:** approx. 60 hours (@ fixed PI =1s)
- **Measuring range:** 0÷1400W/m²
- **Protection rating:** IP65
- **Size:** 155x100x55mm
- **Weight:** 350g (including batteries)
- **Input connectors:** custom HT 5 poles



HT304X Reference Cell For Irradiation Measurement

HT304X is an irradiance reference cell used in conjunction with HT Solar PV testing equipment. The unit can be hard-wired to the main multifunction instrument, or communicate wirelessly using HT SOLAR-02 (above).

MAIN FEATURES

- **Measuring range:** 50÷1400W/m²
- **Basic accuracy:** ± 3.0%reading
- **Type of cells:** Monocrystalline / Polycrystalline
- **Protection rating:** IP65
- **Size:** 120x85x40mm
- **Weight:** 260g
- **Output connector:** Binder



TIS MC4TL MC4 Test Leads

MC4 to 4mm Test Lead Set to allow connection into Solar Panels and an appropriate clampmeter such as the TIS E257 & TIS 438.



TIS 1711 Electrical Installation Certificate For Small Scale PV Systems

Electrical Installation Certificate For Small Scale PV Systems, requirements in accordance with BS EN 7671, BS EN 62446-1 & MCS Guidance.



TIS 1712 Electrical Installation Condition Report For Small Scale PV Systems

Electrical Installation Condition Report For Small Scale PV Systems, requirements in accordance with BS EN 7671, BS EN 62446-1 & MCS Guidance, the certificate is modelled on appendix 6 of BS 7671.



KN 97 91 04 V01 KNIPEX Complete Tool Case For PV Installations

MAIN FEATURES

- With crimping die 97 49 66 for solar cable connectors MC4
- (Multi-Contact) 2.5 - 6.0 mm², locator 97 49 66 1 and set of mounting tools 97 49 66 2
- With Precision Insulation Stripper 12 12 11 with adapted blades for smaller stripping capacities 1.5 / 2.5 / 4.0 / 6.0 mm²
- With Crimp System Pliers 97 43 200 A for exchangeable crimping
- dies; crimping pressure has been set precisely (calibrated) in the factory
- With cable shears 95 16 165 for Cu cables up to Ø 15 mm
- With service tools (hexagonal key) for the change of crimping dies
- Foam insert with recesses for tools, crimping dies and locators
- Shock-resistant plastic case
- Dimensions, exterior (W x H x D): 345 x 80 x 280 mm



TIS 700

SafetyPat Elite Downloading Portable Appliance Tester (5th Edition Compliant)

The TIS 700 Safety Pat Elite is a unique downloading pat tester being the first pat tester with built in and removeable SD card, which can store up to 1 million test results. Then you simply remove the SD card and put it into your PC, the SD card will download all its information into Excel, producing smart pass and fail certification with client details, etc. All this without the need for an expensive software package!

SPECIAL FUNCTIONS

- 5th Amendment Compliant
- Full QWERTY Keypad
- Stores up to 1 million Results onto SD Card
- Appliance Description Entry
- Next Due Test Date
- Stores minimum of 3000 Test Results
- SD Card formatted as Excel File
- Automatically creates Test Result Certificates
- SD Card ensures your tester is always testing
- Mains Adapter
- User Name Entry
- Client Name Entry
- Location Entry
- Battery Operated
- Plus All the normal Testing Features

2 YEAR
WARRANTY

For Video Demonstration
[CLICK HERE](#)

BASIC FUNCTIONS

RANGE

Earth Continuity	up to 0.5Ω
Insulation Test	250V / 500V
True Reading of Leakage	110V & 230V
Polarity Test	
Surge Protected Equipment	



TIS 600

SafetyPat Plus Portable Appliance Tester (5th Edition Compliant)

The TIS 600 Safety Pat Plus is a very simple and easy to use portable appliance tester that works from batteries or an AC/DC power adapter, it will also test ALL portable equipment, 110V, 230V or 415V (110V and 415V with optional adapters). Built in memory stores 300 results which can be written down later, it's as simple as A, B, C, press the button and the tester does the rest. Complete with a padded carrying case, batteries and AC/DC adapter.

SPECIAL FUNCTIONS

- 5th Amendment Compliant
- Tests 230V, 110V & 415V Appliances
- Battery & Mains operation
- Simple and very easy to use
- Fully Portable
- Automatically Stores Test Results
- Tests long Extension Leads
- Tests I.T. Equipment, Computers, etc
- 250V & 500V Insulation Test
- Stores up to 300 Test Results
- 110V and 230V True Leakage Results
- Tests up to 0.5Ω
- Indicates if appliance is on or off
- Complete with free 12 month calibration certificate
- Will even test equipment that does not conform to EN60950
- Single press of the button from start to finish
- Large LCD Display
- Rugged Case with Rubber Boot Carry Strap and Harness

2 YEAR
WARRANTY

For Video Demonstration
[CLICK HERE](#)

BASIC FUNCTIONS

RANGE

Earth Continuity	up to 0.5Ω
Insulation Test	250V / 500V
True Reading of Leakage	110V & 230V
Polarity Test	
Surge Protected Equipment	



TIS 110 230V to 110V Adapter

This Adapter allows you to test all your 110V equipment using the 230V output socket on your PAT Tester.



TIS IEC 110V to IEC Adapter

This Adapter allows you to test all your 110V extension leads by connecting into the end of the uncoiled cable and placing the IEC end into the appropriate socket at the rear of your PAT Tester.



TIS 164 16A 415V 4pin Adapter

This Adapter allows you to test all your 415V equipment using the 230V output socket on your PAT Tester.



TIS 165 16A 415V 5pin Adapter

This Adapter allows you to test all your 415V equipment using the 230V output socket on your PAT Tester.



TIS 324 32A 415V 4pin Adapter

This Adapter allows you to test all your 415V equipment using the 230V output socket on your PAT Tester.

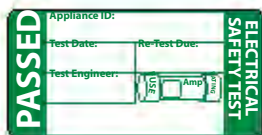


TIS 325 32A 415V 5pin Adapter

This Adapter allows you to test all your 415V equipment using the 230V output socket on your PAT Tester.



TIS 1612-500
Standard Passed Labels
49mm x 25mm - Pack of 500



TIS 1613-200
Standard Failed Labels
49mm x 25mm - Pack of 200



Full Range of
PAT Test Labels
on Page 71

TIS 1710 Certificate Book

Portable Appliance Inspection and Test Records.
In compliance with IET Code of Practice 4th Edition.



TIS 455 AC Line Splitter with Earth Leakage Measurement

The TIS 455 Line Splitter is an ideal accessory when using a clamp meter to measure AC current as it splits the live conductor from the neutral and earth. Ideal when PAT testing to measure loads of individual equipment, including Earth Leakage



For further details
please see Page 50

High Performance, High Precision & High Accuracy

TIS 849

TRMS 1000V AC/DC LCD, LED, Audible & 'Shaker' Voltage and Continuity Tester with Built-in Non-Contact / Contact Voltage Detector, 30mA RCD Test & RST 3-Phase Rotation Detection

For Full List of Features
please see page 19

EN: 61010-1-2-031
CAT III 1000V

EN: 61010-1-2-031
CAT IV 600V

CONFORMS TO
BSEN 61243-3: 2014



TIS 859

TRMS 1000V AC/DC LCD, LED, Audible & 'Shaker' Voltage and Continuity Tester, Built-in Non-Contact / Contact Voltage Detector, 30mA RCD Test & RST 3-Phase Rotation Detection, with Built-in Resistance & Capacitance

For Full List of Features
please see page 19

EN: 61010-1-2-031
CAT III 1000V

EN: 61010-1-2-031
CAT IV 600V

CONFORMS TO
BSEN 61243-3: 2014



TIS 829

Replacement Test Lead Set for the TIS 849 and TIS 859

TIS 849

TIS 859

TIS 829



For Video Demonstration
[CLICK HERE](#)



FEATURES	TIS 849	TIS 859
Removable and fully replaceable shuttered test leads (TIS 829)	✓	✓
TRMS sensing of voltage	✓	✓
Indicates by LED with or without battery power up to 1000V AC / DC	✓	✓
Built in non-contact and contact voltage detector with signal strength indication	✓	✓
Will not trip RCDs even when testing with or without battery power	✓	✓
ACV frequency response 45Hz - 65Hz	✓	✓
IP65 rated, in compliance with BSEN 61243-3: 2014	✓	✓
Conforms fully with HSE GS38	✓	✓
Low battery warning	✓	✓
Complete with padded carrying case and batteries	✓	✓
Audible continuity function with LED indication	✓	✓
30mA RCD Test button	✓	✓
LCD and LED 1000V AC/DC indication of Voltage	✓	✓
Built in backlight and flashlight	✓	✓
RST, 3 phase rotation detection	✓	✓
Shaker, vibration to indicate presence of voltage, above 50V	✓	✓
Audible LED and LCD indication of continuity	✓	✓
Resistance range 1.99Ω, 19.99Ω, 199.9kΩ, and 1000kΩ	-	✓
Capacitance range 199.9μF and 1999μF	-	✓

See our online video demonstration

Simply scan the QR code to the right

Or search for 'Test Instrument Solutions' on 



TIS 8000 Open Jaw Current & Voltage Multi Tester

Our TIS 8000 is the perfect Multi Tester for any electrician, not only do you have a true voltage tester that can be used for proving dead as the tester has no dials and will detect voltage with or without a battery, you also have a 200amp AC Current Clampmeter. Plus the tester has fully removable test leads and can be replaced if damaged by simply purchasing the TIS 8000L Lead Set.

SPECIAL FUNCTIONS

- LED/ LCD Measurement
- Voltage Measurement: 1000V AC, 1500V DC
- Current Measurement: 200A AC
- Leads are Replaceable (See TIS 8000L below)
- Phase Rotation, Continuity Test, Diode Test
- Non Contact Voltage Detector
- Resistance Measurement
- Frequency Measurement
- Torch Light
- Self Test (Voltage & Continuity)
- Duty Cycle
- Low Battery Warning
- Auto Power Off
- Fork Opening 14mm
- IP64 Protection
- Can Be Used For Safe Isolation
- With Appropriate Proving Unit In Accordance With IEC 61243-3:2014
- IP64 Protection
- Compliant to IEC 61243-3:2014, IEC 61010-1:2010
- CAT IV 600V, CATIII 1000V
- GS38 Compliant (With Removable Tip Covers)

For Video Demonstration
CLICK HERE



TIS 8000 SIKIT Open Jaw Current & Voltage Multi Tester Complete Safe Isolation Kit

Kit Contains:

TIS 8000

Open Jaw Current
& Voltage Multi Tester
(full details above)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

**A TRUE Complete
Safe Isolation Kit**



TIS 8000L Spare Lead Set for the TIS 8000

Replacement Lead Set for the TIS 8000 Open Jaw & Voltage Multi Tester, fully conforms to HSE GS38.



TIS 850**LCD and LED Voltage / Continuity Tester with Phase Rotation****TIS 851****LCD and LED Voltage / Continuity Tester with Phase Rotation & Built In Proving Test**

The TIS 851 is an exclusive voltage and continuity tester, with phase rotation test and a built in proving test that conforms fully to BSEN 61243-3: 2014 and HSE GS38 12B. The TIS 850 does not have the proving test function. TIS 851 is packed with many outstanding features which include will not trip any rcd when testing between live and earth, digital LCD and LED voltage indication, indicates the presence of voltage even if the battery is dead or missing, built in two pole phase rotation test, AC / DC voltage 0 - 690V, single pole phase test, all this plus much more. Please see the full list of outstanding features in the section below marked 'special functions'.

BASIC FUNCTIONS	RANGE	ACCURACY
AC/DC Voltage	12V/24V/50V/120V/230V/400V/690V	±(3%+3d) or 5V
Continuity Test	0 - 1MΩ	
Phase Rotation Test	3 Phase 4-wire system AC 50/60Hz	
Phase Range	120±5 degree	
Response Time	<2s at 90% of each Voltage	
Peak Current	<3.5mA (at 690V)	
Internal Battery	Approx. 33mA	
Consumption	(Battery 3V, measuring 690V AC)	

**2 YEAR
WARRANTY**

Compliant To
BSEN 61243-3 : 2014

CE EN: 61010-1

EN: 61010-1
CAT IV 600V

EN: 61010-1
CAT III 1000V

GS38
COMPLIANT
SPECIAL FUNCTIONS

- AC/DC Voltage 0V - 690V, LED 12V - 690V
- Cat III 1000V, CAT IV 600V
- Will Not Trip RCDs when connected Live to Earth
- Loud Continuity Buzzer
- 2 Pole Phase Rotation Test
- Built in Proving Test to Comply with HSE GS38, 12b (This feature is only available on the TIS 851)
- Conforms fully to BSEN 61243-3 : 2014
- LCD and LED Voltage Indication
- Polarity Test
- Single Pole Live Side Test
- Fast Single handed Testing on 13A Sockets
- Auto Power On / Off, Torch Light & IP64
- Low Battery Warning
- Complete with Padded Case
- Heavy Duty Lead
- Rugged Rubberised Case and Grip
- Indicates presence of Voltage with Dead or Missing Battery


For Video Demonstration
CLICK HERE
GENERAL CHARACTERISTICS
Power: 1.5V x 2 AAA Batteries
Weight: 180g
Size: 245mm x 70mm x 30mm
Accessories: Padded Case
TIS 819**Voltage Tester 12V - 690V AC / DC****SPECIAL FUNCTIONS**

- Voltage Range: 12, 24, 50, 120, 230, 400 & 690 Volts
- Automatic Polarity Indication
- Frequency Range 0-60Hz
- IP 54 & Shock proof
- Conforms to BSEN 61243-3:2014
- Conforms to H.S.E. GS 38
- Works without batteries
- CAT III 600V & CAT IV 300V

For Video Demonstration
CLICK HERE
**2 YEAR
WARRANTY**

COMPLIANT WITH
BSEN 61243-3: 2014

COMPLIANT WITH
H. S. E. GS38
**TIS PU1****Proving Unit for all Voltage Testers 0 - 690V**

The TIS PU1 is a new product we have introduced at a very competitive price, to 'prove' AC/DC voltage testers from 0 - 690 Volts, this includes our very own range of voltage testers. The unit is very easy to use, simply connect the probes onto the two connectors of the PU1 and press the voltage tester down and all the lights will illuminate including any accoustical tone for voltage / continuity. A low battery warning device is fitted to the PU1. The unit is fully compliant to the GS38 requirements.

SPECIAL FUNCTIONS

- Compliant to GS38
- Proves all Voltage Testers 0 - 690V
- Ideal for use with all TIS Voltage Testers and any other Voltage Tester
- Low Battery Indication
- Supplied with 6 x AA Alkaline Batteries
- Built in On / Off Switch
- Rugged Housing with easy opening battery cover

**2 YEAR
WARRANTY**

GS38
COMPLIANT


01274 752 407



01274 870 175



sales@tis-tic.co.uk

Please contact your local wholesaler for pricing

TIS 859 SIKIT TRMS Voltage & Continuity Complete Safe Isolation Kit

Kit Contains:

TIS 859

**TRMS 1000V AC/DC Digital
Voltage & Continuity Tester**
(full details on pages 30 & 31)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

A TRUE Complete Safe Isolation Kit

For Video Demonstration
CLICK HERE



TIS 849 SIKIT TRMS Voltage & Continuity Complete Safe Isolation Kit

Kit Contains:

TIS 849

**TRMS 1000V AC/DC Digital LCD
LED Voltage & Continuity Tester**
(full details on pages 30 & 31)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

A TRUE Complete Safe Isolation Kit



TIS 851 SIKIT Voltage & Continuity Complete Safe Isolation Kit

Kit Contains:

TIS 851

Voltage & Continuity Tester
(full details on page 33)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

**A TRUE Complete
Safe Isolation Kit**

For Video Demonstration
CLICK HERE



TIS 850 SIKIT Voltage & Continuity Complete Safe Isolation Kit

Kit Contains:

TIS 850

Voltage & Continuity Tester
(full details on page 33)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

**A TRUE Complete
Safe Isolation Kit**



TIS 819 SIKIT Voltage Only Complete Safe Isolation Kit

Kit Contains:

TIS 819

Voltage Tester
12V 690V AC/DC
(full details on page 33)

TIS PU1

Proving Unit
(full details on page 33)

TIS PUK

Dual Instrument Pouch
(full details on page 59)

TIS BKIT

Lockout Kit inc. Hasp, Padlocks, Tag, etc
(full details on page 36)

**A TRUE Complete
Safe Isolation Kit**



TIS BKIT Safety Lockout Kit

KIT CONTENTS

- Lockout Pouch
- Lockout Dielectric Hasp
- Lockout Padlock
- Pin Out MCB Lockout
- Pin In MCB Lockout
- MCB Lockout-Red
- Writing Pen with Eraser For Tags
- Lockout Tag



TIS EKIT Safety Lockout Kit

KIT CONTENTS

- Lockout Pouch
- Lockout Dielectric Hasp
- Dielectric Lockout Padlock
- Pin Out MCB Lockout
- Pin In MCB Lockout
- MCB Lockout-Red / with thumb screw
- Writing Pen with Eraser For Tags
- Lockout Tag



TIS TAG

Pack of 10 Lock off Tags



TIS PEN

Pack of 2 Pens



TIS UL3

Universal 3 Phase Lock



TIS NT1

No Tool MCB Lock



TIS MCCBL

MCCB Locking Device



TIS CB1

Simple Circuit Breaker Lockout



TIS PO

MCB Pin Out



TIS PI

MCB Pin In



TIS NH1

Nylon Hasp



TIS SH1

Steel Hasp



TIS LY1

Yellow Steel Lock



TIS LR1

Red Steel Lock



TIS LB1

Blue Steel Lock



TIS 1900 Digital Thermal Image Camera

Thermal image cameras are designed to make your work easier, more productive and effective. 160 X 120 resolution at 50Hz for real-time capture; temperature range from -20°C to 350°C (-4°F to 662°F), 32x continuous zoom, picture-in-picture, voice comment recording and text annotation on images.

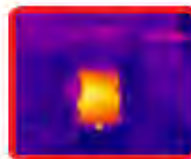
Hot/cold spot marker automatically finds the hottest and coldest spots. It includes memory card, lithium polymer battery & power supply and usb cable. All this and one hour video recording too!

BASIC FUNCTIONS	RANGE	ACCURACY
Object Temperature	-20°C to +150°C 0°C to +350°C	±2°C or 2% of rdg ±2°C or 2% of rdg
Storage Jpeg	>6000 Pictures	
Video Storage	Standard Mpeg-4 encode 1280 x 960 @ 30fps	

*For a comprehensive list of all the specification please see the TIS 1900 4 page flyer

SPECIAL FUNCTIONS

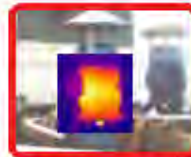
- **High Resolution IR Images** 6,400 pixels (160 x 120) infrared resolution
- **Visible Light Digital Camera** 5 Megapixels digital camera resolution with flash provides sharp images regardless of lighting conditions
- **Picture in Picture** Displays thermal image super-imposed over a digital image
- **LED Flashlight** Allows the visual camera and fusion to be used in poorly lit environments
- **Wide Temperature Range** From -20°C to +350°C targeting electrical and industrial applications
- **±2% Accuracy** Reliable temperature measurement
- **Thumbnail view** Easy to view and analyze images quickly
- **Audio recorded with the video images** A speaker to listen to audio recorded with the video image up to one hour video recording
- **Li-ion Rechargeable Battery** Lasts >4 hours continuous use; replaceable
- **HDMI** High resolution video output
- **8GB Micro SD Card** Stores >6000 images
- **Copy to USB** Easy upload images from camera to USB memory card
- **Area (Min/Max) Mode** Shows the minimum or maximum temperature reading in the selected area



Full Infrared



Colour Alarms



Picture-in-Picture



Full Visible Light



Complete with Free Reports Software

GENERAL CHARACTERISTICS

Weight: 500g
Size: 224mm x 77mm x 96mm

STANDARD ACCESSORIES

- Infrared Camera with Lens
- Micro SD Card
- Adapter
- USB Cable
- HDMI Cable
- Earphone
- Battery
- Software
- Gift Box



For Video Demonstration
CLICK HERE



THT8 120 X 90 Pixel Pocket Infrared Camera with USB C Connector for a Smartphone Device

THT8 is the new ultra-compact and pocket-sized thermal camera equipped with a high resolution 120x90pxl IR sensor, a measuring range of -20°C ÷ 400°C and a field of view of 50°x 38°, which makes it suitable for common and frequent hydraulic, mechanical or electrical maintenance.

Thanks to its small size it is perfect to be connected directly to your smartphone, and to be used via the new HT Smart Camera application (available only for Android).

MAIN FEATURES

- IR Resolution: 120 x 90 pixel
- Temperature Range: -20°C - 400°C
- Image Frequency: 25Hz
- Field of View: 50° x 38°
- Lens: 2.3mm
- IFOV: 7.29mrad
- Focus mode: Fixed focus
- Digital zoom: 1x 32x
- Area measurement information: Max, Min & Average
- Colour palettes: Iron, Rainbow, Hot White, Hot Black, Medical, Arctic, Hot Iron, Fulgurite
- Built in LED light: Smartphone flashlight
- Internal Memory: Smartphone memory
- Communication Modes: USB type C
- Display: Smartphone display
- Size (LxWxH): 50 x 30 x 20mm



THT80 120 x 90 Pixel Compact Infrared Camera

THT80 is the new compact professional thermal camera equipped with a high resolution 120x90pxl IR sensor, a measuring range of -20°C ÷ 550°C and a field of view of 50° x 37° which makes it suitable for use in frequent hydraulic, mechanical or electrical maintenance.

It is also equipped with the AutoFusion function and a large color display with high brightness capacitive touch-screen, for immediate use, as well as being usable through the new and convenient HT Pro Camera application.



MAIN FEATURES

- IR Resolution: 120 x 90 pixel
- Temperature Range: -20°C - 550°C
- Image Frequency: 50Hz
- Field of View: 50° x 37°
- Lens: 2.3mm
- IFOV: 7.3mrad
- Focus mode: Fixed focus
- Digital zoom: 1x 32x
- Picture in Picture function
- Auto fusion image enhancement
- Touch Screen Display
- Battery operation time: 3 hours
- Size (LxWxH): 133 x 87 x 24mm
- On-camera report building: Textual notes
- Communication modes: USB tipo C, Wi-fi, micro SD
- Measurement tools (In live mode) - 3 spots, central spot, hot / cold, 3 areas, horizontal & vertical lines
- Area measurement information - Max, Min & Centre
- IR Video recording
- Measurement corrections - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation & distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max, below min alarm & interval alarm
- Span modes - Automatic, manual & histogram
- Built-in LED Light
- Internal memory: 3.4GB

THT100 80 x 80 Pixel Thermal Camera with Resolution

THT100 is the new professional thermal camera equipped with a high resolution 80 x 80pxl IR sensor which makes it suitable for use in electrical, mechanical, plumbing, ventilation and refrigeration systems. It is equipped with a measuring range of -20° C ÷ 650.0° C and a field of view of 21° x 21°, producing high quality thermal images and videos, as well as allowing AutoFusion and Picture in Picture functions. The thermal imaging camera is equipped with a modern internal icon structure and a high brightness capacitive touch-screen display. It is also equipped with Wi-Fi connection, as well as being compatible with the new and convenient HT Pro Camera application.

MAIN FEATURES

- IR Resolution: 80 x 80 pixel
- Temperature Range: -20°C - 650°C
- Image Frequency: 50Hz
- Field of View: 21° x 21°
- Focal length: f 1.0
- Lens: 7.5mm
- IFOV: 4.53mrad
- Focus mode: Focus Free
- Digital zoom: 1x 32x
- Built-in camera - 2MP, focus free
- IR video recording
- Internal memory: 3.4GB
- Touch Screen Display
- Picture in Picture function
- Battery operation time: 4 hours
- Size (LxWxH): 240 x 101 x 110mm
- Auto fusion image enhancement
- Measurement tools (In live mode):
 - None, centre spot, 3 spots, hot/cold spots, 3 areas, vertical & horizontal lines, screening mode
- Area measurement information:
 - Max, Min & Average
- Measurement corrections:
 - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max alarm, below min alarm, interval alarm
- Span modes: Automatic, manual & histogram
- On camera report building: Text annotation
- Communication modes: USB type C, Wi-fi, SD card



THT200 160 X 120 Pixel Infrared Thermal Camera with Resolution

THT200 is the new professional thermal camera equipped with a high resolution 160 x 120pxl IR sensor that makes it suitable for use in electrical, mechanical, plumbing, ventilation and refrigeration systems. It is equipped with a measuring range of -20°C ÷ 650.0°C and a field of view of 20.7° x 15.6°, producing high quality thermal images and videos, as well as allowing AutoFusion and Picture in Picture functions. The thermal imaging camera is equipped with a modern internal icon structure and a high brightness capacitive touch-screen display. It is also equipped with Wi-Fi connection, as well as being compatible with the new and convenient HT Pro Camera application.

MAIN FEATURES

- IR Resolution: 160 x 120 pixel
- Temperature Range: -20°C - 650°C
- Image Frequency: 50Hz
- Field of View: 20.7° x 15.6°
- Focal length: f 1.0
- Lens: 7.5mm
- IFOV: 2.26mrad
- Focus mode: Manual Focus
- Digital zoom: 1x 32x
- Built-in camera: 2MP, focus free
- IR video recording
- Internal memory: 3.4GB
- Touch Screen Display
- Picture in Picture function
- Battery operation time: 4 hours
- Size (LxWxH): 240 x 101 x 110mm
- Auto fusion image enhancement
- Measurement tools (In live mode):
 - None, centre spot, 3 spots, hot/cold spots, 3 areas, vertical & horizontal lines, screening mode
- Area measurement information:
 - Max, Min & Average
- Measurement corrections:
 - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max alarm, below min alarm, interval alarm
- On camera report building: Text annotation
- Communication modes: USB type C, Wi-fi, SD card



THT300 388 X 284 Pixel Advanced Infrared Thermal Camera with Resolution

THT300 is the new professional thermal imaging camera equipped with a high resolution 384 x 288pxl IR sensor which makes it suitable for use in electrical, mechanical, plumbing, ventilation and refrigeration systems. It is equipped with a measuring range of -20°C ÷ 650.0°C and a field of view of 41.5° x 31.1°, producing high quality thermal images and videos, as well as allowing AutoFusion and Picture in Picture functions. The thermal imaging camera is equipped with a modern internal icon structure and a high brightness capacitive touch-screen display. It is also equipped with Wi-Fi connection, as well as being compatible with the new and convenient HT Pro Camera application.

MAIN FEATURES

- IR Resolution: 388 x 288 pixel
- Temperature Range: -20°C - 650°C
- Image Frequency: 50Hz
- Field of View: 41.5° x 31.1°
- Focal length: f 1.0
- Lens: 9mm
- IFOV: 1.89mrad
- Focus mode: Manual Focus
- Digital zoom: 1x 32x
- Built-in camera: 2MP, focus free
- IR video recording
- Internal memory: 3.4GB
- Touch Screen Display
- Picture in Picture function
- Battery operation time: 4 hours
- Size (LxWxH): 240 x 101 x 110mm
- Auto fusion image enhancement
- Measurement tools (In live mode):
 - None, centre spot, 3 spots, hot/cold spots, 3 areas, vertical & horizontal lines, screening mode
- Area measurement information:
 - Max, Min & Average
- Measurement corrections:
 - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max alarm, below min alarm, interval alarm
- On camera report building: Text annotation
- Communication modes: USB type C, Wi-fi, SD card



THT500 160 X 120 Pixel Advanced Infrared Thermal Camera with Resolution

THT500 is the new professional thermal camera equipped with a high resolution 160 x 120pxl IR sensor that makes it suitable for use in electrical, mechanical, plumbing, ventilation, refrigeration and electricity distribution systems. It is equipped with a measuring range of $-20^{\circ}\text{C} \div 650.0^{\circ}\text{C}$ and a field of view of $17.3^{\circ} \times 13^{\circ}$, producing high resolution thermal images and videos, as well as allowing AutoFusion and Picture in Picture functions. It also has an ergonomic strap and an integrated laser distance meter, which allows you to measure the distance to the subject under analysis. The thermal imaging camera is equipped with a modern internal icon structure and a high brightness capacitive touch-screen display. Thanks to the Wi-Fi connection it is possible to download the thermograms on your mobile device and through the new and convenient HT Pro Camera application you can create PDF reports and share them quickly.

MAIN FEATURES

- IR Resolution: 160 x 120 pixel
- Temperature Range: $-20^{\circ}\text{C} - 650^{\circ}\text{C}$
- Image Frequency: 50Hz
- Field of View: $17.3^{\circ} \times 13^{\circ}$
- Focal length: f 1.0
- Lens: 9mm
- IFOV: 1.89mrad
- Focus mode: Manual Focus
- Digital zoom: 1x 32x
- Built-in camera: 2MP, focus free
- Built in LED light
- IR video recording
- Internal memory: 3.4GB
- Touch Screen Display
- Picture in Picture function
- Battery operation time: 4 hours
- Size (LxWxH): 240 x 101 x 110mm
- Auto fusion image enhancement
- Measurement tools (In live mode):
 - None, centre spot, 3 spots, hot/cold spots, 3 areas, vertical & horizontal lines, screening mode
- Area measurement information:
 - Max, Min & Average
- Measurement corrections:
 - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max alarm, below min alarm, interval alarm
- On camera report building: Text annotation
- Communication modes: Micro USB, Wi-fi, micro SD, micro HDMI
- Span modes: Automatic, manual, histogram
- Laser pointer & Laser distance meter



THT600 384 x 288 Pixel Advanced Thermal Camera with Resolution

THT600 is the new professional thermal imaging camera equipped with a high resolution 384x288pxl IR sensor, which makes it suitable for both industrial and construction use and, above all, for human temperature screening. It is equipped with two specific measurement ranges, one standard and one for Screening mode: $-20^{\circ}\text{C} \div 650.0^{\circ}\text{C}$ and $32.0^{\circ}\text{C} \div 42.0^{\circ}\text{C}$, producing high resolution thermal images and videos. The peculiarity of the instrument is the icon structure inside a color display with high brightness capacitive touch-screen.

MAIN FEATURES

- IR Resolution: 384 x 288 pixel
- Temperature Range: $-20^{\circ}\text{C} - 650^{\circ}\text{C}$
- Image Frequency: 50Hz
- Field of View: $17^{\circ} \times 12.7^{\circ}$
- Focal length: f 1.0
- Lens: 22mm
- IFOV: 0.77mrad
- Focus mode: Manual Focus
- Digital zoom: 1x 32x
- Built-in camera: 2MP, focus free
- Built in LED light
- IR video recording
- Internal memory: 3.4GB
- Touch Screen Display
- Picture in Picture function
- Battery operation time: 4 hours
- Size (LxWxH): 240 x 101 x 110mm
- Auto fusion image enhancement
- Measurement tools (In live mode):
 - None, centre spot, 3 spots, hot/cold spots, 3 areas, vertical & horizontal lines, screening mode
- Area measurement information:
 - Max, Min & Average
- Measurement corrections:
 - Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance compensation
- Colour palettes - Iron, rainbow, white hot, black hot, brown hot, blue/red hot/cold, feather, above max alarm, below min alarm, interval alarm
- On camera report building: Text annotation
- Communication modes: Micro USB, Wi-fi, micro SD, micro HDMI
- Span modes: Automatic, manual, histogram
- Laser pointer & Laser distance meter



HTB500 Boroscope with Rechargeable Battery & Interchangeable Probe

The HTB500 is a portable digital borescope which allows carrying out inspections inside parts of objects not physically accessible (typically rotating equipment) and not visible to the naked eye. The instrument uses a waterproof external feeler with 4 LEDs with high brightness and a photo camera, in order to obtain a high-resolution image on the display.

MAIN FEATURES

- Sensor Size: 1/4in (CMOS), 300.000pxl
- Max sensor resolution: 640 x 480 pixel
- Max sampling frequency: 30FPS/S
- Colour depth: 24 bit
- Zoom image: 1.0x - 2.0x
- External probe length: 1m (39in)
- Probe diameter: 6mm (0.2in)
- Brightness adjustment: 10 levels
- Rechargeable battery: Li-ION, 2000mAh
- Low battery indication: Yes
- Battery operation time: 5 hours
- Colour LCD Display: 640 x 320 pixel
- Weight in grams (battery included): 345g
- Size (LxWxH): 250 x 100 x 95mm



BP36 Optional Probe 3 Meters Long for the HTB500 Boroscope

IP67 3 Metre probe attachment for the HTB500 borescope.



TIS E227 TRMS Professional Multimeter

SPECIAL FUNCTIONS

- 3 - 5/6 Digits & 4 - 1/2, 20,000 Counts Max, Large easy to read LCD Display
- Nominal 5/Sec Fast Measurements; Fully Auto-Ranging
- 61 Segment Analog Bar-graph Updates 60/Sec
- Paper white Back-Lit LCD Display
- Dual Digital Display AC + Hz Readings
- AC True RMS Conversion & Intelligent Auto Power Off
- Data Hold, Diode Tester & Relative Zero Mode
- Crest (Peak Hold) Max/Min Readings
- High-Update Record Max/Min Readings
- Update Intervals DC's 100ms / AC's 120ms
- BeepJack™ Input Warning against improper plug in to μ AmA/A Terminals
- VFD V & VFD-Hz Measures Fundamental V & Hz of most Variable-Frequency-Drives
- AC/DC Voltage Ranges 200.00mV to 1000.0V
- Best Basic DCV accuracy up to 0.09%
- ACV Bandwidth up to 5kHz
- Ohms Ranges 200.00 Ω to 20.000M Ω
- nS Range 60.00nS
- BeepLit™ Continuity. Features Audible Beep & Visible Backlight Effects
- Frequency Ranges 9.999Hz to 100.0kHz
- AC/DC μ A, mA & A Ranges 200.00 μ A to 10.000A
- Capacitance Ranges 20.00nF to 20.00mF
- Type-K Temperature Readings -40.0°C to 1090.0°C; Selectable °F Readings
- Optional Purchase Magnetic Hanger
- Rugged Fire Retarded Casing with Battery and Fuse Access Door
- Replaceable Protective Holster with Probe-Holders & Tilt-Stand
- HBC 1kV Fuses Protected on μ AmA/A Terminals
- Transient Protection up to 8kV 1.2/50 μ s Lightning Surge
- LVD Meets: EN61010-1/-2-030/-2-033, CAT-III 100V & CAT-IV 600V
- EMC: EN61326-1: 2013



EMC: EN 61326-1
(EN55022, EN61000-3-2/-3
& EN61000-4-2/-3/-4/-5/-6/-8/-11)

For Video Demonstration
CLICK HERE

Please see page 43
opposite for a full
specification of the TIS E227

COMPLETE WITH
Calibration Certificate

**5 YEAR
WARRANTY**



part of

ELITE - RANGE

TIS E217 TRMS Electrical Multimeter

SPECIAL FUNCTIONS

- 3 - 5/6 Digits, 6000 Counts, Large easy to read LCD Display
- Fast Measurements, 5/Sec; Fully Auto-Ranging
- True RMS AC Conversion & Intelligent Auto Power Off
- Data Hold, Diode Tester & Relative Zero Mode
- Records Max/Min Readings & Calculates Average Readings over time
- VFD V & Hz Fundamental Readings of most Variable-Frequency-Drives
- Paper white Back-Lit LCD Display
- BeepLit™ Continuity. Features Audible Beep & Visible Backlight Effects
- Non-Contact EF-Detection (NCV) with Hi/Lo Selectable Sensitivities
- Probe-Contact EF-Detection for more precise indication of Live
- 3 ϕ -Rotation-R (Regular-sensitivity mode) for Supply Systems (Probe-contact)
- 3 ϕ -Rotation-M (Hi-sensitivity mode) for Motors (Probe-contact)
- AutoV LoZ Feature. Automatic DC & AC 1000V Selection with Low Initial Impedance to Drain Ghost Voltages
- DC/AC V Ranges: 600.0mV to 1000V
- Ohms Ranges: 600.0 Ω to 60.00M Ω
- Cx Ranges 2000nF to 10.00mF for Start & Run Motor Capacitors
- Line Level Frequency Ranges 99.99Hz to 50.00kHz
- DC/AC A Ranges 6.000A to 10.00A (20A for 30s / 5 mins cool down)
- DC/AC μ A Ranges 200.0 μ A to 2000 μ A
- Type-K Temperature Readings -40°C to 400°C or -40°F to 752°F
- Beep-Jack™ Input Warning against improper A-Terminal Plug In
- Rugged Fire Retarded Housing
- Replaceable Protective Holster with Probe-Holders & Tilt-Stand
- Batteries and Fuses Access Door with Optional Magnetic Hanger
- Transient Protection up to 6kV 1.2/50 μ s Lightning Surge
- LVD: EN61010-1/-2-030/-2-033, CAT-II 1kV, CAT-III 600V & CAT-IV 300V
- EMC: EN61326-1: 2013



EMC: EN 61326-1
(EN55022, EN61000-3-2/-3
& EN61000-4-2/-3/-4/-5/-6/-8/-11)

**5 YEAR
WARRANTY**

Please see page 43
opposite for a full
specification of the TIS E217

COMPLETE WITH
Calibration Certificate

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part of

ELITE - RANGE

High Performance, High Precision & High Accuracy

E217 & E227 MULTIMETER FEATURE CHART

FEATURES	ELITE - RANGE	TIS E217	TIS E227
		3 - 5/6 6000 Count	4 - 1/2 20,000 Count
• 3 - 5/6 Digits & 4 - 1/2, 6000 / 20,000 Count, Large LCD Display			
• Nominal 5/Sec Fast Measurement; Fully Auto-Ranging		✓	✓
• 61 Segment Analog Bar-graph Updates 60/Sec		-	✓
• Dual Digital Display AC + Hz Readings		-	✓
• AC TRMS Conversion		✓	✓
• Intelligent Auto Power Off		✓	✓
• Date Hold		✓	✓
• Relative Zero Mode		✓	✓
• BeepJack™ Input Warning against improper plug in to μ mA/A Terminals		A only	✓
• Crest (Peak-Hold) Max / Min Readings		-	✓
• Auto V LoZ Feature. Auto DC & AC 1000V Selection with low initial to drain ghost voltages		✓	-
• Records Max/Min Readings & Calculates Avg Reading		✓	-
• High-Update Record Max/Min Readings, Update Intervals DC's 100ms / AC's 120ms		-	✓
• VFD V & VFD-Hz Measures Fundamental V & Hz of most Variable-Frequency-Drives		✓	✓
• Back Lit Display		✓	✓
• nS Range 60.00nS		-	✓
• Ohms Range 200.00 Ω to 20.000M Ω		✓	-
• Ohms Range 600.00 Ω to 60.000M Ω		-	✓
• AC/DC Voltage Ranges 200.00mV to 1000.0V		600mV to 1000V	✓
• 3phase Mains Rotation		✓	-
• 3phase Motor Rotation		✓	-
• Non Contact Voltage (NCV) Hi/Lo Sensitivity Probe Contact for precise detection		✓	-
• Best Basic DCV accuracy up to 0.09%		-	✓
• ACV Bandwidth up to 20kHz		-	✓
• CX Ranges 2000nF - 10mF for Start & Run Motor Capacitors		✓	-
• Capacitance Ranges 20.00nF to 20.00mF		-	✓
• BeepLit™ Continuity. Features Audible Beep & Visible Backlight Effects		-	✓
• Frequency Ranges 9.999Hz to 100.0kHz		99.99Hz to 50Hz	✓
• AC/DC μ A, mA & A Ranges 200.00 μ A to 10.000A		200 μ A to 2000 μ A	✓
• Temperature Readings -40°C to 400°C or °F		✓	-
• Transient Protection up to 8kV		6kV	✓
• LVD Meets EN61010-1/61010-2-032/61010-2-033 to Measurement: CAT-III 1000V & CAT-IV 600V		CAT-II 1kV CAT-III 600V CAT-IV 300V	✓
• EMC: EN61326-1: 2013		✓	✓
• Diode Test		✓	✓

High Performance, High Precision & High Accuracy

The TIS 280 is packed with features at a very affordable price which includes resistance up to 60M ohm, bar graph display, 6000 count display, capacitance to 99.99mF, frequency to 10MHz, temperature -40°C to 1000°C, CAT IV 600V, non contact voltage detector, full overload protection, rel function, max/min function, auto power off, back lit display. All this in a rugged rubberised double injection moulded case with a built in stand.

BASIC FUNC.
RANGE

DC Voltage	600V
AC Voltage	600V
VFC Measurement	600V
DC Current	10A
AC Current	10A
Resistance	60MΩ
Capacitance	99.99mF
Frequency	10Hz - 10MHz
Temperature	-40°C to 1000°C -40°F to 1832°F
Display Count	6000

SPECIAL FUNCTIONS

- Duty Cycle
- Continuity
- Diode Test
- NCV
- Max / Min
- Relative Mode
- Data Hold
- Low Battery Indication
- Back Light
- TRMS
- Auto Power Off

**2 YEAR
WARRANTY**
**UK
CA**
**EN: 61010-1
CAT III 600V**

GENERAL CHARACTERISTICS

Power: 9V Battery Weight: 350g
Size: 92mm x 188mm x 50mm

STANDARD ACCESSORIES

- Test Leads
- Thermocouple

TIS 201
Pocket Size, Auto-Ranging Multimeter and Temperature

The TIS 201 is a pocket size auto-ranging digital multimeter which is packed with features which include temperature °C / °F, -20°C to 1000°C, -4°F to 1832°F, a thermocouple and measuring ranges which include AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, diode test, plus a 4000 count digital display, data hold, backlit display, continuity buzzer all in a rugged protected case and fused on all ranges.

**2 YEAR
WARRANTY**
BASIC FUNC.
RANGE
ACCURACY

DC Voltage	400mV/4V/40V/400V/600V	±(0.5%+3d)
AC Voltage	4V/40V/400V/600V	±(1.2%+5d)
DC Current	400μA/4000μA/40mA 400mA/10A	±(1.0%+5d) ±(2.0%+10d)
AC Current	400μA/4000μA/40mA 400mA/10A	±(1.2%+5d) ±(2.5%+10d)
Resistance	400Ω/4kΩ/40kΩ/400kΩ 4MΩ/40MΩ	±(0.8%+5d)
Capacitance	5nF/50nF/500nF/5uF/50uF 100uF	±(3.0%+5d)
Frequency	0 ~ 10MHz	±(1.5%+5d)
Duty Cycle	1% - 99%	±(2.0%+2d)
Temperature °C	-20°C to 1000°C	±(2.0%+2d)
Temperature °F	-4°F to 1832°F	±(2.0%+2d)

SPECIAL FUNCTIONS

- 4000 Count Display
- Auto-Ranging
- AC / DC Voltage
- AC / DC Current
- Resistance
- Capacitance
- Frequency
- Temperature
- Duty Cycle
- Diode Test
- Continuity Buzzer
- Backlit Display
- Rugged Rubberised Case
- Data Hold

CE EMC & LVD
EN: 61010-1

CE EN: 61326
EN: 61010-2-031

**EN: 61010-1-2-031
CAT III 600V**
GENERAL CHARACTERISTICS

Power: 2 x 1.5V AAA Batteries
Weight: 202g
Size: 150mm x 74mm x 41mm


TIS 258
Digital Multimeter with Temperature

Robust "pocket size" digital multimeter with AC/DC voltage 500V AC/DC current 200μA to 10A, resistance to 20MΩ, -20°C to 750°C, data hold, diode test, continuity buzzer, rubber boot and built in stand, 2000 count LCD display, with backlight.

BASIC FUNCTION
RANGE

Maximum Display	2000 Counts
Basic Accuracy	0.5%
DC Voltage	200mV - 500V
AC Voltage	200mV - 500V
DC Current	200μA - 10A
AC Current	200μA - 10A
Resistance	200Ω - 20MΩ
Temperature Range	-20°C - 750°C, -4°F - 1382°F

SPECIAL FUNCTIONS

- Diode Test
- Continuity
- Data Hold
- Back Light
- Auto Power Off
- Manual Range
- Power by 9V Battery x 1

**2 YEAR
WARRANTY**
**IEC 61010
CAT II 600V**
CE EMC & LVD
EN: 61010-1

CE EN: 61326
EN: 61010-2-031


Multimeter Selection Guide

part of

ELITE - RANGE

FEATURES	TIS 258	TIS 201	TIS 280	TIS E217	TIS E227
• DC Voltage	✓	✓	✓	✓	✓
• AC Voltage	✓	✓	✓	✓	✓
• DC Current	✓	✓	✓	✓	✓
• AC Current	✓	✓	✓	✓	✓
• Resistance Ω	✓	✓	✓	✓	✓
• Capacitance	-	✓	✓	✓	✓
• Frequency	-	✓	✓	✓	✓
• Duty Cycle	-	✓	✓	✓	✓
• Temperature	✓	✓	✓	✓	-
• Auto Ranging	-	✓	✓	✓	✓
• Manual Ranging	✓	-	✓	✓	✓
• TRMS	-	-	✓	✓	✓
• Bar Graph	-	-	-	✓	✓
• Back Light	✓	✓	✓	✓	✓
• Display Count	2000	4000	6000	6000	20000
• Max / Min	-	-	✓	✓	✓
• Peak Hold	-	-	-	-	✓
• Data Hold	✓	✓	✓	✓	✓
• NCV	-	-	✓	✓	-
• Auto Power Off	✓	✓	✓	✓	✓

TIS E237**TRMS Digital Clamp Meter 600A AC with Amp™Tip Jaws****SPECIAL FUNCTIONS**

- VFD-V & Hz for fundamental V/Hz of most Variable-Frequency-Drives
- AmpTip™ Low-Current-Range Calibrated at Jaw-Tip for Slim-Conductors
- AC True RMS Voltage and Current Functions
- Fast 80ms PEAK-RMS Mode to Capture In-Rush Currents
- 3 ϕ -Rotation-R for MAINS Supply (Probe-contact)
- 3 ϕ -Rotation-M (Hi-sensitivity mode) for Motors (Probe-contact)
- DC μ A Ranges 200.0 μ A to 2000 μ A (via leads) for HVAC Flame Sensors
- Cx Ranges 200.0 μ F to 2500 μ F for Start & Run Motor Capacitors

*Please see page 47 opposite for
a full specification of the TIS E237*

For Video Demonstration
CLICK HERE

**5 YEAR
WARRANTY**

COMPLETE WITH
Calibration Certificate



EMC: EN 61326-1
(EN55022, EN61000-3-2/-3
& EN61000-4-2/-3/-4/-5/-6/-8/-11)

part of **ELITE - RANGE**

**TIS E247****TRMS Digital Clamp Meter 600A AC/DC with Amp™Tip Jaws****SPECIAL FUNCTIONS**

- VFD-V & Hz for fundamental V/Hz of most Variable-Frequency-Drives
- 3 - 5/6 Digits, 6000 Counts, Large LCD Display
- 35mm Conductor Size Hall-Effect 600A DC/AC Jaws
- AC + DC, AC True RMS Voltage and Current Functions
- Fast 80ms PEAK-RMS Mode to Capture In-Rush Currents
- DC μ A Ranges 200.0 μ A to 2000 μ A (via leads) for HVAC Flame Sensors
- DC + ACA Ranges 60.00A to 600.0A + AmpTip™ DC + ACA 60.00A Range
- Cx Ranges 200.0 μ F to 2500 μ F for Start & Run Motor Capacitors

*Please see page 47 opposite for
a full specification of the TIS E247*

For Video Demonstration
CLICK HERE

**5 YEAR
WARRANTY**

COMPLETE WITH
Calibration Certificate



EMC: EN 61326-1
(EN55022, EN61000-3-2/-3
& EN61000-4-2/-3/-4/-5/-6/-8/-11)

part of **ELITE - RANGE**

**TIS E257****TRMS Digital Clamp Meter 1000A AC/DC with Amp™Tip Jaws****SPECIAL FUNCTIONS**

- VFD-V & Hz for fundamental V/Hz of most Variable-Frequency-Drives
- 51mm Conductor Size Hall-Effect 1000A AC/DC Jaws
- 51mm Conductor Size Ultra-Slim 1000A AC Jaws
- Record Max/Min/Avg Mode (Auto-Ranging)
- Fast 80ms PEAK-RMS Mode to Capture In-Rush Currents
- 5ms Crest Mode to capture instantaneous +Peak & -Peak
- DC μ A Ranges 200.0 μ A to 2000 μ A (via leads) for HVAC Flame Sensors
- DC + ACA Ranges 60.00A to 1000A + AmpTip™ DC + ACA 60.00A Range

*Please see page 47 opposite for
a full specification of the TIS E257*

For Video Demonstration
CLICK HERE

**5 YEAR
WARRANTY**

COMPLETE WITH
Calibration Certificate



EMC: EN 61326-1
(EN55022, EN61000-3-2/-3
& EN61000-4-2/-3/-4/-5/-6/-8/-11)

part of **ELITE - RANGE**



High Performance, High Precision & High Accuracy



CLAMP METER FEATURE CHART

FEATURES	ELITE - RANGE	TIS E237	TIS E247	TIS E257
• VFD-V & Hz for fundamental V/Hz of most Variable-Frequency-Drives		✓	✓	✓
• Fast Measurement updates		5/Sec	5/Sec	3/Sec
• 3 - 5/6 Digits, 6000 Count, Large LCD Display		✓	✓	✓
• Conductor Size Hall-Effect DC/AC Jaws		-	35mm 600A DC/AC	51mm 1000A DC/AC
• Conductor Size Ultra-Slim AC Jaws		30mm 600A	30mm 600A	-
• AmpTip™ Low-Current-Range Calibrated at Jaw-Tip for Slim-Conductors		✓	✓	✓
• True RMS Voltage and Current Functions		AC	AC + DC, AC	AC + DC, AC
• Input Protection on General Functions		600V AC/DC	600V AC/DC	1000V AC/DC
• Auto Power Off		✓	✓	✓
• Data Hold		✓	✓	✓
• Record Max/Min/Avg Mode (Auto-Ranging)		✓	✓	✓
• Relative Mode (Auto-Ranging) with DC-Zero Mode on DCA, DC + ACA Ranges		✓	✓	✓
• Fast 80ms PEAK-RMS Mode to Capture In-Rush Currents		✓	✓	✓
• Back-Lit, Easy to Read LCD Display		✓	✓	✓
• 5ms Crest Mode to capture instantaneous +Peak & -Peak		-	-	✓
• Flash Light for easy operation in dim areas		-	-	✓
• Non-Contact EF-Detection (NCV)		✓	✓	✓
• Probe-Contact EF-Detection for more precise indication of Live		✓	✓	✓
• 3φ-Rotation-R for MAINS Supply (Probe-contact)		✓	✓	✓
• 3φ-Rotation-M (Hi-sensitivity mode) for Motors (Probe-contact)		✓	✓	✓
• Type-K Temperature Readings -40.0°C to 400°C or -40.0°F to 752°F selectable		✓	✓	✓
• DCμA Ranges 200.0μA to 2000μA (via leads) for HVAC Flame Sensors		✓	✓	✓
• DC + ACA Range		-	60.00A to 600.0A	60.00A to 1000.0A
• DCA Range		-	60.00A to 600.0A	60.00A to 1000.0A
• ACA Range		60.00A to 600.0A	60.00A to 600.0A	60.00A to 1000.0A
• DC + ACV Range		-	600.0V	1000V
• DCV Range		600.0V	600.0V	1000V
• ACV Range		600.0V	600.0V	1000V
• Ohms Ranges 60.00kΩ		✓	✓	✓
• Cx Ranges 200.0μF to 2500μF for Start & Run Motor Capacitors		✓	✓	✓
• Diode Test & Fast Audible Continuity		✓	✓	✓
• Line Level ACV Frequency 5.00Hz to 999.9kHz		✓	✓	✓
• Soft Carrying Pouch		✓	✓	✓
• Rugged Fire Retarded Casing with Battery Access Door		✓	✓	✓
• Transient Protection up to 8kV 1.2/50μs Lightning Surge		6kV	6kV	8kV
• LVD: EN61010-1/61010-2-032/61010-2-033 to CAT-III 1000V & CAT-IV 600V		CATIII 600V CATIV 300V	CATIII 600V CATIV 300V	CATIII 1000V CATIV 600V
• EMC: EN61326-1 (EN55022, EN61000-3-2/-3 & EN61000-4-2/-3/-4/-5/-6/-8/-11)		✓	✓	✓

High Performance, High Precision & High Accuracy

TIS 438**1000A AC/DC TRMS Auto-Ranging Clamp Meter with Inrush Reading**

Our TIS 438 is designed and manufactured to the very latest standards and features 1000A AC/DC current, AC/DC voltage, resistance, capacitance, frequency from the clamp, logic frequency and duty cycle, 6000 count display, TRMS, inrush current reading, continuity buzzer, work light, back light, non contact voltage detection, relative measurement and auto power off. The TIS 438 is packed with features for the professional electrician.

BASIC FUNCTIONS	RANGE	ACCURACY
DC Voltage	60mV/600mV/6V/60V/600V	±0.7%+3d
AC Voltage	60mV/600mV/6V/60V/600V	±0.8%+3d
DC Current	60A/600A/1000A	±2.5%+6d
AC Current	60A/600A/1000A	±2.5%+6d
Resistance	600Ω/6kΩ/60kΩ/600kΩ 6MΩ/60MΩ	±0.8%+3d
Capacitance	10nF/100nF/10uF/100uF/1mF 10mF/100mF	±4.0%+5d
Frequency (from Clamp)	0 ~ 10MHz	±1.5%+5d
Frequency (AC Voltage)	0 ~ 10MHz	±1.5%+5d
Logic Frequency	0 ~ 10MHz	±0.5%+3d
Duty Cycle	10% ~ 90%	±3.0%

STANDARD ACCESSORIES

• Carrying Case • Test Leads

GENERAL CHARACTERISTICS

Power: 1 x 9V 6F22 Battery Weight: 386g
Size: 238mm x 92mm x 50mm

SPECIAL FUNCTIONS

- 6000 Count Display
- Jaw Opening Ø40mm
- Auto / Manual Range
- Auto Power Off
- Relative Mode
- Diode Test
- Continuity Buzzer
- Max / Min Hold
- Data Hold
- Backlit Display
- Work Light
- TRMS
- Inrush Current
- Non Contact Voltage

**2 YEAR
WARRANTY**

CE EMC & LVD
EN: 61010-1

CE EN: 61326
EN: 61010-2-031

EN: 61010-1-2-031
CAT III 1000V

**TIS 418****600A AC/DC Auto-Ranging Clamp Meter**

The TIS 418 is a 600A AC/DC clamp meter which is supplied with a host of features, for the everyday electrician or maintenance electrician. These include AC/DC current, frequency, capacitance, resistance, duty cycle, temperature -20°C to 1000°C, complete with thermocouple. Other features include max/min hold, auto power off, auto ranging, continuity buzzer, data hold, work light, back light and non contact voltage test.

BASIC FUNC.	RANGE	ACCURACY
DC Voltage	600mV/6V/60V/600V	±0.7%+2d
AC Voltage	6V/60V/600V	±0.8%+3d
DC Current	60A/600A	±3.0%+6d
AC Current	60A/600A	±2.5%+6d
Resistance	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ	±1.2%+2d
Capacitance	40nF/400nF/4uF/40uF/400uF/4000uF	±4.0%+5d
Frequency	0 ~ 10MHz	±1.5%+5d
Duty Cycle	0.1% ~ 99.9%	±3.0%
Temperature	-20°C ~ 1000°C -4°F ~ 1832°F	±2.0%

GENERAL CHARACTERISTICS

Power: 3 x 1.5V AAA Batteries
Weight: 239g
Size: 218mm x 78mm x 35mm

STANDARD ACCESSORIES

• Carrying Case • Test Leads
• Thermocouple

SPECIAL FUNCTIONS

- 6000 Count Display
- Jaw Opening Ø26mm
- Auto / Manual Range
- Auto Power Off
- Max / Min Hold
- Data Hold
- Non Contact Voltage Test
- AC/DC Current and Voltage
- Continuity Buzzer
- Resistance
- Capacitance
- Frequency
- Temperature -20°C - 1000°C
- Duty Cycle and Diode Test

**2 YEAR
WARRANTY**

CE EMC & LVD
EN: 61010-1

CE EN: 61326
EN: 61010-2-031

EN: 61010-1
CAT II 1000V

**TIS 518****600A AC Auto-Ranging Clamp Meter**

The TIS 518 is part of our range of digital auto ranging clamp meters. This unit has many features, including a non contact voltage detector, plus AC/DC voltage, AC current, resistance, continuity buzzer, max hold, data hold, diode test, auto power off, jaw work light and display light. The TIS 518 is an ideal instrument for the everyday electrician / maintenance man.

BASIC FUNCTIONS	RANGE	ACCURACY
DC Voltage	200mV/2V/20V/200V 600V	±0.8%+2d ±1.0%+2d
AC Voltage	2V/20V/200V 600V	±1.0%+5d ±1.2%+5d
AC Current	2A/20A 200A 600A	±3.0%+10d ±2.5%+10d ±1.5%+5d
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ 20MΩ	±1.2%+2d ±2.0%+5d

GENERAL CHARACTERISTICS

Power: 3 x 1.5V AAA Batteries
Weight: 238g
Size: 218mm x 78mm x 35mm

STANDARD ACCESSORIES

• Carrying Case • Test Leads

SPECIAL FUNCTIONS

- 2000 Count Display
- Jaw Opening Ø26mm
- Auto / Manual Ranging
- Auto Power Off
- Diode Test
- Continuity Buzzer
- Max Hold
- Data Hold
- Backlit Display
- Work Light
- Non Contact Voltage

**2 YEAR
WARRANTY**

CE EMC & LVD
EN: 61010-1

CE EN: 61326
EN: 61010-2-031

EN: 61010-1-2-031
CAT III 600V



TIS 570

TRMS AC / DC Earth Leakage Clamp Meter to 0.001A

The TIS 570 AC/DC Earth Leakage Clamp Meter will measure from 0.001A to 20A AC and from 0.001A to 10A DC, with True RMS AC Voltage and AC Current plus a Resistance Range from 0.1Ω to 500kΩ, having a Continuity Buzzer <100Ω. Other features include Max / Min, Data Hold, Backlight, Zero Function, Auto Power Off and Overload Protection.

BASIC FUNCTIONS	RANGE	ACCURACY
DC Voltage	0 - 300V	±1.0% + 2d
AC Voltage (TRMS)	0 - 300V	±1.2% + 5d
DC Current	0 - 10A	±1.0% + 10d
AC Current	0 - 20A	±1.0% + 5d
Resistance	0 - 500KΩ	±1.0% + 2d

SPECIAL FUNCTIONS

- True RMS AC Voltage & AC Current
- Continuity Buzzer 0 < 100Ω
- Back Lit Display
- Max / Min Function
- Data Hold Function
- Zero Function
- Complete with Soft Passed Case with Belt Loop
- Fully Compliant Test Leads with Probes
- Full Instruction Manual

GENERAL CHARACTERISTICS

Power: 2 x 1.5V AAA Batteries
Weight: 262g
Size: 206mm x 76mm x 33.5mm

EN: 61010-1
CAT III 600V

2 YEAR
WARRANTY

For Video Demonstration
[CLICK HERE](#)



TIS 560

Earth Leakage Clamp Meter 0.001mA to 60A AC

The TIS 560 is a highly sensitive earth leakage clamp meter from 0.001mA which will also read up to 60A AC, having a large jaw opening of Ø31mm for such a compact, pocket size clamp meter. For a full list of features and specifications please see the sections below, marked 'basic functions' and 'special functions'.

BASIC FUNCTIONS	RANGE	ACCURACY
AC Current	2mA	±2% + 5d
Resolution	0.001mA	±2% + 5d
AC Current	20mA	±2% + 5d
Resolution	0.01mA	±2% + 5d
AC Current	60A	<50A ±2% + 5d >50A ±3% + 5d
Frequency	50 to 60Hz	
Max permitted input	120% full range for 60 seconds	

SPECIAL FUNCTIONS

- High Sensitivity from 0.001mA
- Data Hold
- Jaw Opening Ø31mm
- Measures up to 60A AC
- 2000 Count
- LCD Display
- Low Battery Warning
- Pocket Size
- Zipped Padded Case

GENERAL CHARACTERISTICS

Power: 2 x 1.5V AAA Batteries
Weight: 136g
Size: 176mm x 59mm x 29mm

EN: 61010-1
CAT III 600V

2 YEAR
WARRANTY

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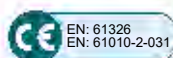
TIS 455

AC Line Splitter with Earth Leakage Measurement

The TIS 455 Line Splitter is an ideal accessory when using a clamp meter to measure AC current as it splits the live conductor from the neutral and earth. Ideal when PAT testing to measure loads of individual equipment, including Earth Leakage

SPECIAL FUNCTIONS

- Allows for Easy AC Current Measurement using a Clamp Meter on 2 or 3 Wire Power Cords
- AC Voltage to 250 Volts, AC Current to 13A
- Allows Measurement of Earth Leakage
- Enables safe measurement of Current without the need to separate conductors
- Ideal for use with the TIS 518, 418, 438, 237, 247 & 257 Clamp Meters. Plus TIS 560 & TIS 570 Earth Leakage Clamp Meters
- Separates the Live Conductor from the Neutral and Earth
- Allows Voltage Measuring on 13A Sockets



For Video Demonstration
[CLICK HERE](#)



F3000

TRMS 3000Amp AC Clampmeter with Flexible Clamp Jaws

TRMS Clamp meter with flexible current probe to measure up to 3000A AC, designed to measure AC current up to 3000A in TRMS in total autorange and reaches CAT IV 600V, CAT III 1000V according to standard IEC/EN61010-1.

The clamp is provided with innovative flexible current probe capable of reaching a maximum diameter of 110mm and allowing for an easy reading in any condition. The clamp is provided with a wide display with 3000 measuring spots, Data HOLD function and Backlight to allow for a simple reading even in poorly lit environments. The clamp is also provided with the auto power off function to preserve its own battery.

MAIN FEATURES

- Maximum diameter: 110mm
- TRMS
- Current measuring range: 3000Amp
- AC Current
- Backlit LCD Display
- Auto ranging
- Auto power off
- Data hold
- Power supply
- Measurement category: CAT IV 600V, CAT III 1000V



TIS 1005 Loop Impedance, RCD 30mA Socket Polarity Checker 230V

The TIS 1005 is a pocket size checker for indicating loop impedance, socket polarity and rcd 30mA are all ok. Indication is by led's and audible buzzer. It is an ideal unit for initial 'checking out' of a 13A socket and will advise if the circuit is ok, needs attention or needs urgent attention, an ideal product for housing associations, landlords, council property departments, shopping centers, electricians, etc.

BASIC FUNCTIONS	RANGE	ACCURACY
Nominal Voltage	230V AC	±10%
Frequency Range	50Hz - 60Hz	
Contact Voltage Range	<50V AC (Relative to Ground)	
Overload Protection	AC / DC 300V	

SPECIAL FUNCTIONS

- Earth Loop Check at mains frequency
- Checks condition of Earth Loop
- Loop Detection Ranges <1.8Ω, 1.8Ω - 92Ω, >92Ω
- 30mA RCD Test
- 3 Coloured LEDs (Green, Amber, Red) give indication of condition
- Socket Checked against 17 possible fault conditions
- Microprocessor controlled, with built in self check
- Audible Buzzer
- Simple and Easy to Use, plug in and switch the socket on



GENERAL CHARACTERISTICS

Weight: 40g
Size: 72mm x 78mm x 80mm



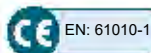
For Video Demonstration
CLICK HERE



TIS 1000 13A Socket Tester with Sounder

Designed to test 230V 13A sockets to international standards 61010-1 CATIII 600V in one easy step, simply plug in for visual and audible indication, reliable and easy to use wiring conditions that are included; correct, missing earth, live earth reversal, live neutral reversal, missing neutral*. Simple and easy to use with no maintenance or batteries.

*this unit will not indicate neutral/earth reversal



TIS 870 Circuit Fuse / Breaker Finder with NCV and Socket Test

The TIS 870 features the very latest technology in fuse/breaker location. The advanced microprocessor locates the fuse/breaker with pin-point accuracy by using the very latest second pass technology. Simply plug the transmitter into the circuit to test then pass the receiver over the fuses / breakers. You will hear several tones on various breakers, etc. Then pass over them for a second time when only one of the fuse/breakers will cause the TIS 870 to light up, indicating by tone which is protecting the circuit under test. The TIS 870 also features a non contact voltage tester and the transmitter also acts as a socket tester with "buzzer".

SPECIAL FUNCTIONS

- Quickly, Easily and Accurately Identifies the Fuse/Breaker
- Built-in Non Contact Voltage Test
- Built-in Socket Test
- Fully Automatic Operation
- Very Latest 2nd Pass Technology for accurate Fuse / Breaker Detection
- Rugged Design
- Two Part Kit: Transmitter and Receiver
- Verifies presence of AC Voltage
- Can Locate Breaks in Cables
- Buzzer and LED Indication



"Very cost effective way of identifying circuits / breakers"



GENERAL CHARACTERISTICS

Power: 1 x 9V MN1604 Battery
Weight: 95g
Size: 175mm x 45mm x 30mm

For Video Demonstration
CLICK HERE

TIS 1100 R2, R1 + R2 Socket Adapter

Our TIS 1100 is a must have accessory for any electrician who carries out testing. It eliminates the need to remove the faceplate of the socket from the wall when testing R2, R1 + R2, saving valuable time and expense. The adapter also allows voltage testing from the socket, without having to open the 'shutters' of the wall socket.

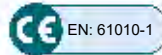
BASIC FUNCTIONS

RANGE

Rated Voltage	230V
Rated Current	Max 2A
Operating Environment	Temperature 0°C - 40°C
Relative Humidity	<80%

SPECIAL FUNCTIONS

- Eliminates the need to remove socket faceplate from wall
- 'Speeds Up' testing of R2, R1 + R2
- Enables voltage testing at the wall socket
- Saves time and money when testing
- A 'must have' for all electricians
- Robust and Rugged design



GENERAL CHARACTERISTICS

Weight: 66g
Size: 68mm x 62mm x 62mm



TIS 934 Optical / Accoustical Non-Contact Voltage Detector

The TIS 934 is an optical and accoustical non contact voltage detector that detects ac voltage from 50V - 1000V, HSE recommends that voltages over 50V must not be touched, therefore a voltage detector that detects voltage from 50V is a necessary purchase. For all other features see special functions below.

SPECIAL FUNCTIONS

- Detects 50V - 1000V
- Built in Self Audible Test
- Bright LED Light, Loud Buzzer
- On / Off Button
- Checks for Cable Breaks
- Uses Advanced Digital Filter Technology for reliable results
- CAT IV for Indoor / Outdoor Use, IP65

GENERAL CHARACTERISTICS

Power: 2 x AAA Batteries (supplied)
Weight: 55g
Size: 155mm x 25mm x 23mm

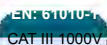


TIS 950 Non-Contact Voltage Detector with IP65 Rubber Housing, Vibration and LED Indication

The TIS 950 is a simple, yet very accurate indicator of AC voltage by LED and vibration, having a built in pocket clip and having IP65 approval, a simple screw off cap for battery replacement

GENERAL CHARACTERISTICS

Power: 2 x AAA Batteries (supplied)
Weight: 45g
Size: 150mm x 20mm x 20mm



For Video Demonstration
[CLICK HERE](#)



TIS 415

Phase Rotation Plus Non Contact/Contact Motor Rotation Tester

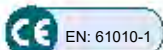
The TIS 415 determines the rotary field of three Phase systems and rotational direction of three Phase motors, using non-contact or contact technology. Simply place the TIS 415 on top of the motor with the base of the instrument facing the shaft of the motor, press the "green" button and the magnetic field of the motor will be detected along with its clock wise or anti-clock wise rotation. Alternatively connect the TIS 415 with the test leads to the motor terminals, give the shaft a quarter turn to the right and the rotational field will also be displayed.

SAFETY SPECIFICATIONS

- Meets DIN VDE0411, IEC61010, VDE0413-7
- Maximum Operating Voltage 400V for All Ranges
- CAT III, 300V
- Current Consumption Max 20mA

SPECIAL FUNCTIONS

- Determines Rotary Field of 3 Phase Systems
- Non-Contact Motor Rotation
- Contact Motor Rotation
- Clear and Precise LED Indication
- Wireless
- Rotational Chart



GENERAL CHARACTERISTICS

Power: 6F22 / 9V Weight: 150g
Size: 124mm x 61mm x 27mm

STANDARD ACCESSORIES

- 2 x AA Batteries
- Test Leads
- 3 x Crocodile Clips
- Zipped Padded Case
- Rubber Housing



TIS USB1

USB Tester

SPECIAL FUNCTIONS

- Input & Output Ports Type A
- Tests Load at 0.5a, 1a, 2a & 3a
- Resolution: 0.01mAh
- Energy: 0 - 1000WH
- Voltage Range: 4 - 24.00V DC
- Current Range: 0.05 - 3.00A DC
- Operational Resistance Measurements
- Capacity: 0 - 99999mAh
- CE Approved
- Q.C. USB 1.0, 2.0, 3.0 Fast Charge Protocol



For Video Demonstration
[CLICK HERE](#)

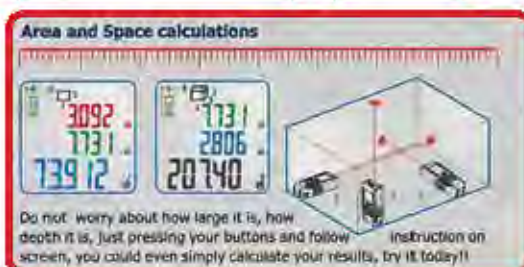


TIS LD40

40 Metre Laser Distance Meter

SPECIAL FUNCTIONS

- Pythagoras Measurement
- Single Length, Area and Volume Measurements
- 0.05M - 40M Measurement
- Resolution: 0.001M
- Accuracy: $\pm 1.5\text{mm}$
- Measuring Speed: 0.5 seconds
- Laser Type: 650nm, Class 2 <1mW
- Laser Beam Size: 25mm @ 30M
- Battery Life: 10,000 Measurements
- Auto Power Off
- Highly Accurate SX10V2 Software
- Low Battery Warning & Back Lit Display
- Option to measure from the front or base of the unit
- Metric or Feet and Inches Measurement



Class 2 Laser Product
EN 60825-1:2007

GENERAL CHARACTERISTICS

Power: 2 x AA Alkaline Batteries
Weight: 45g
Size: 122mm x 53mm x 35mm

STANDARD ACCESSORIES

- Carrying Case
- 2 x AA Batteries
- Safety Strap
- Instruction Manual



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TIS 1310 Digital LED Light Meter & Standard Lux Levels

The TIS 1310 is an LED light meter which will measure LED, daylight, red light, amber, yellow, green, blue and purple light, as well as measuring standard lux/light levels from 0.01 lux (emergency light levels) up to 200,000 lux. The unit has a built in opto-sensor and features max/min/relative value/peak hold/lux/foot candle measurements with a 3½ digit LCD display with both digital and analogue bar graph readings in a compact hand held housing with tripod capability and zero calibration function. The ideal instrument for the lighting professional, maintenance engineer or electrician.

BASIC FUNCTIONS	RANGE	ACCURACY
Max Range	0.01 - 200,000 Lux 0 - 999900 CD (LED)	±3.0%
Max Resolution	0.01 Lux / 0.01Fc 0.01 CD	±(3% + 2d)
Measuring Rate	2 times / second	

SPECIAL FUNCTIONS

LED Measurement Selection:

- L1 LED Daylight, L2 LED Red Light
- L3 LED Amber (Yellow) Light, L4 LED Green Light
- L5 LED Blue Light, L6 LED Purple Light
- L7 - L9 Default Standard Lighting
- Enables Testing of LED Red Strobe Light
- 3½ Digit Display
- Measures Emergency Light Levels 0.01 Lux
- Measuring Range 0.01 - 200,000 Lux
- Digital and Bar Graph Readings
- Auto / Manual Ranging
- Max / Min Function & Peak Hold
- Relative Measurement
- Auto Power Off & Data Hold
- Compact with Built In Sensor
- Backlit Display & Low Battery Warning
- Cosine Corrected & Calibration Zero Function

**2 YEAR
WARRANTY**

CE EMC & EN

GENERAL CHARACTERISTICS

Power: 1 x 9V 6F22 Battery (200 Hour Life)
Weight: 200g
Size: 165mm x 85mm x 38mm
Accessories: Padded Case



For Video Demonstration
CLICK HERE

TIS 770 Digital Sound Level Meter

The TIS 770 meets the very latest regulations including IEC 61672-1 Type 2, IEC 651 Type 2 and ANSI S1.1 Type 2. A & C weighting, LCD display with analogue bar graph, fast response, slow response, max hold feature, backlit display, auto-ranging, auto power off. Complete with padded carrying case and sensor muffler.

BASIC FUNCTIONS	RANGE	ACCURACY
Measurement	30dB - 130dB	±1.5dB
Frequency	30Hz - 8kHz	
Resolution	0.1dB	

SPECIAL FUNCTIONS

- LCD Display
- Analogue Bar Graph
- A & C Weighting
- Fast / Slow Response
- Max Hold
- Data Hold
- Auto Power Off
- Auto & Manual Ranging
- Low Battery Display
- Over Range Display
- Backlit Display
- 30dB - 130dB
- 6 Measurement Gears

GENERAL CHARACTERISTICS

Power: 4 x 1.5V AAA Batteries
Weight: 200g
Size: 193mm x 60mm x 29mm

STANDARD ACCESSORIES

- Instruction Book
- Sensor Muffler
- Padded Case

**2 YEAR
WARRANTY**

IEC 61672-1
Type 2

IEC 651
Type 2



TIS 1309 Digital Anemometer

Our TIS 1309 digital anemometer will measure a wide range of air velocity including metre per second, feet per minute, kilometer per hour, mile per hour and nautical mile per hour. Plus air flow at cfm, cmm and cms, plus flow area settings. The TIS 1309's other features include max/min, display backlight, auto power off and low battery indication.

BASIC FUNCTIONS RANGE ACCURACY

Air Velocity:

m/s (metre per second)	0.40 ~ 30.0	±3.0%
ft/m (feet per minute)	80 ~ 5900	±3.0%
km/h (kilometer per hour)	1.4 ~ 108.0	±3.0%
mile/h (mile per hour)	0.9 ~ 67.0	±3.0%
Knots (nautical miles per hour)	0.8 ~ 58.0	±3.0%

Air Flow:

CFM	0 to 99990	0 to 9.999ft ²
CMM	0 to 99990	0 to 9.999m ²
CMS	0 to 9999	0 to 9.999m ²

SPECIAL FUNCTIONS

- Large LCD Display
- Built in Vane
- Backlit Display
- Max / Min Measurement
- Data Hold
- Auto Power Off
- Measures Air Velocity
- Measures Air Flow
- Flow Area Settings
- Conforms to Part F (Ventilation) of Building Regs



GENERAL CHARACTERISTICS

Power: 1 x 9V 6F22 Battery
Weight: 200g
Size: 165mm x 85mm x 38mm

STANDARD ACCESSORIES

- Padded Case
- Battery
- User Manual

CONFORMS TO

Ventilation of Building Regulations : Part F

TIS 82 Non-Contact Infrared Thermometer

The TIS 82 is an ideal 12:1 ratio, Non-Contact Infrared Thermometer which can measure in °C or °F, -50°C - 850°C or -56°F - 1562°F with a fast response time of 500ms, large Laser Circular Sight, Hi / Lo Alarm, plus many more outstanding features.

SPECIAL FUNCTIONS

- Temperature Range: -50°C - 850°C, -56°F - 1562°F
- Best Accuracy: ±1.5%, ±1.5°C or ±1.5°F, ±0.5%, ±0.5°C or ±1°F
- Display Resolution: 0.1
- Distance to Spot Size Ratio: 12:1
- Response Time (95% Reading): 500ms
- Spectral Response: 8µm - 14µm
- Laser Power: Class 2 (II) operation;
Output < 1mW, Wavelength 630 - 670nm
- Laser Sighting: Circular
- Emissivity: 0.10 to 0.95
- Adjustable Emissivity (from 0.10 to 0.95)
- °C / °F Selection
- Temperature Data Hold
- Search
- Max / Min Room Temperature
- Hi / Lo Alarm
- Display Back Light
- Sleep Mode
- Power by 9V (6F22) x 1



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Please contact your local wholesaler for pricing

The TIS 720 is a dual input, T1 and T2 k-type digital thermometer that has a temperature range of -200°C up to 1372°C, -328°F up to 1999°F. The extremely low/high temperature range means it is ideal for refrigeration, cold store or high temperature environments such as paint plants / steel production and maintenance applications. For a list of the features please see 'special functions' section below.

BASIC FUNCTIONS	RANGE	ACCURACY
Centigrade Scale	-60°C to 1372°C	0.1% rdg +1°C
	-60°C to 200°C	0.1% rdg +2°C
Fahrenheit Scale	-76°F to 1999°F	0.1% rdg +2°F
	-76°F to -328°F	0.1% rdg +4°F


GENERAL CHARACTERISTICS

Power: 4 x 1.5V AAA Batteries
Weight: 240g
Size: 160mm x 83mm x 38mm


SPECIAL FUNCTIONS

- -200°C to 1372°C / -328°F to 1999°F
- Dual Input T1 & T2 K-Type (supplied with 2 x Oven Probes)
- High Accuracy 0.1% reading +1°C
- Fast Response Time
- Large LCD Display
- Max / Min Temperature Readings
- T1 Measurement, T2 Measurement, T1-T2 Measurement
- Adj. Button for Self Checking Calibration
- Relative Mode to Zero Display
- Data Hold
- Back Lit Display
- Rugged, Rubberised Housing with Stand
- APO Function
- Auto Ranging / Auto Power Off

For Video Demonstration

CLICK HERE

TIS AP2

K-Type Air Probe


TIS LP2

K-Type Liquid Probe


TIS NP2

K-Type Needle Probe


TIS SP2

K-Type Gas / Air Probe


TIS PC1

K-Type Pipe Clamp



TIS BODYIR Dual Forehead & Ear Medical Infrared Thermometer

The TIS BODYIR Infrared Thermometer is a very simple and non-invasive way to measure a persons temperature and is ideal for pin pointing high temperatures.



SPECIAL FUNCTIONS

- Ear Mode
- Forehead Mode
- Room / Surface Mode
- 1 Second Reading
- C° / F°
- Fever Alarm
- Silent Mode
- Child Mode
- Recall Last 20 Readings
- Magnetic Head Cover



For Video Demonstration
CLICK HERE

CE
0482

FDA

EC REP

Wellkang Ltd
Suite B, 29 Harley Street
London, W1G 9QR, UK

BASIC FUNCTIONS	RANGE	ACCURACY
Forehead Mode	35°C to 42.2°C 95°F to 108°F	±0.2°C ±0.4°F
Ear Mode	35°C to 42°C 95°F to 107.6°F	±0.2°C ±0.4°F
Object Mode	0°C to 100°C 32°F to 212°F	±0.1°C ±0.2.0°F



TIS CO2 Carbon Dioxide, Temperature & Humidity Monitor

Co2 is naturally occurring gas emitted at high levels by human activity, along with being one of several greenhouse gases in our atmosphere. CO2 only accounts for 0.03% of fresh air and if you breathe in high concentrations of it, you could suffer from carbon dioxide Intoxication.

Symptoms Include headache, Irregular heartbeat, nausea, unconsciousness or worse. The TIS CO2 is a CO2 monitor that measures CO2 concentration, temperature and humidity. This monitor can be used in homes, shopping centres, schools offices and vehicles.

MAIN FEATURES

- CO2 Range: 400 - 5000ppm
- Temperature: -10.0°C - 50.0°C
- Humidity: 0 - 99%RH
- Data Hold
- Maximum Value
- Minimum Value
- Average Value
- Time Weighted Average
- Short Term Exposure Limit
- Sensor - NDIR
- Audio & Visual Alarm
- Low Battery Warning
- LCD Screen
- Backlight
- Protective Case
- User Manual
- USB Cable for recharging
- Rechargeable Battery (Supplied)



TIS MC4TL MC4 to 4mm Test Leads

The TIS MC4TL test leads allow you to plug into the panels and then to the TIS 438 to measure DC Current and Voltage.

TEST LEADS MEET
VERY LATEST
BSEN STANDARDS



TIS 2FLK Fused Test Lead Set

Comprises of test leads, probes, crocodile clips and fuses ideal for all test instruments having 4mm sockets.

TEST LEADS MEET
VERY LATEST
BSEN STANDARDS



TIS 3TLK Test Lead Kit (unfused)

Comprises of test leads, probes, crocodile clips. Ideal for all test instruments having 4mm sockets, most manufacturers.

TEST LEADS MEET
VERY LATEST
BSEN STANDARDS



TIS 4TL Test Leads (unfused)

Test leads complete with probes. Ideal for all test instruments having 4mm sockets, most manufacturers.

TEST LEADS MEET
VERY LATEST
BSEN STANDARDS



TIS 5TLK Long Nose Needle Test Lead Set

Universal long nose lead set to fit most manufacturers multimeters, comes complete with long nose probes that comply with HSE GS38 and suitable crocodile clips.

TEST LEADS MEET
VERY LATEST
BSEN STANDARDS



TIS 15 Small Test Instrument Pouch

The TIS 15 is suitable for our range of voltage testers or any instrument that does not exceed the following dimensions:
250mm x 70mm x 40mm



TIS 25 Large Test Instrument Pouch

The TIS 25 is suitable for our general range of test equipment that does not exceed the following dimensions:
230mm x 170mm x 50mm

This case includes a carrying handle and a removeable shoulder strap.



TIS PUK Dual Instrument Pouch

The TIS PUK is suitable for our range of voltage testers with space for a proving unit or any instrument that does not exceed the following dimensions:
280mm x 80mm x 40mm

This Case includes a removeable shoulder strap



TIS 2901**Complete Electrical Installation Certificate
Single Phase & Three Phase 18th ED AM2****For Video Demonstration
CLICK HERE****TIS 2903****Complete Electrical Condition Report
Single Phase & Three Phase 18th ED AM2****For Video Demonstration
CLICK HERE****TIS 2905****Schedule Of Test & Circuit Detail Continuation Sheets
Single Phase & Three Phase 18th ED AM2****For Video Demonstration
CLICK HERE****TIS 2906****Complete Electrical Minor Works Certificate
Single Phase & Three Phase 18th ED AM2****For Video Demonstration
CLICK HERE****TIS 2907****Dedicated EVSE Installation Certificate Book**

The new single signature Electrical Installation Certificate for a single circuit supplying an electric vehicle charging point, conforms to Appendix 6 of BS7671: 2018+ A2, suitable for Single Phase and Three Phase properties.

**For Video Demonstration
CLICK HERE****TIS 1710****Portable Appliance Inspection and Test Records**

TIS 1814 Emergency Lighting Log Book

Contains:

- System Details
- Standards
- Site and Contact Details
- Luminaires and Test Switch Locations
- Daily Inspection Sheet
- Monthly / Annual Inspection and Test Records
- Service Details
- Fault Action Records
- Staff Training Sheets
- Fire Officer Visit Records

CONFORMS TO
BS 5839, BS 5839-1, H.2, H.3, H.4, H.5, H.7 : 2017



TIS 1815 Emergency Lighting Certificate Book

Contains:

- Design Sheets
- Verification Sheets
- Periodic Inspection and Test Certificates
- Installation Sheets
- Completion Certificates

CONFORMS TO
BS 5839, BS 5839-1, H.2, H.3, H.4, H.5, H.7 : 2017



TIS 1816 Fire Alarm Log Book

Contains:

- Fire Alarm Routine Testing
- Site and Contact Details
- Panel and Zone Locations
- Locations of Alarm, Detectors and Devices
- Weekly Testing Schedule
- Asset Register of Fire Extinguishers
- Asset Register of Fire Blankets & Hose Reels
- Asset Register of Fire Doors and Emergency Doors
- Service Records of Extinguishers, Blankets & Hose Reels
- Weekly Inspection Record for Extinguishers, Blankets

COMPLIES WITH
BS 5266-1, BS 5266 Part 1 Clause 12.1, BSEN 50172 / bs 5266-8
BSEN 1838 : 1999 / BS 5266 : 1999, BS 5266-1 : 2016

- Hose Reels, Fire & Emergency Doors
- False Alarm Reports & Maintenance Reports
- Fire Test Drills & Staff Training Reports
- Fire Officer Visit Report



TIS 1817 Fire Alarm Certificate Book

Contains:

- Installation Certificate
- Commissioning Certificate
- Modification Certificate
- Design Certificate
- Acceptance Certificate
- Verification Certificate

COMPLIES WITH
BS 5266-1, BS 5266 Part 1 Clause 12.1, BSEN 50172 / bs 5266-8
BSEN 1838 : 1999 / BS 5266 : 1999, BS 5266-1 : 2016



PQA820 Single Phase & Three Phase Power Quality Analyser

When designing them, HT has taken particular care of three aspects: setting, the operating or storage environment and data transfer. In combination with PQA820, the ACONBIN adapter (optional) is required.

- PQA820 does not need to be set. They simply need to be connected, started and they respectively record 383 and 44 quantities simultaneously.
- They are provided with a comfortable IP65 case, which allows working in any kind of environment.
- When recording has finished, thanks to the Wi-Fi connection, the devices are capable of transferring all data onto a tablet, smart phone or PC.

Further to the Wi-Fi connection, PQA devices are provided with USB connection for transferring data via cable to the PC through the provided TopView software.

They do not need any batteries since they are auto power-supplied from the mains they are analyzing. The internal battery is automatically recharged by the input voltage and will provide the necessary energy to go on recording in case power supply is interrupted. To make the most of the technology used by PQA820 and PQA819 we recommend using the HTanalysis App (available for free download on AppStore and Google Play) on a tablet or smart phone.



Here are some of the functions of HTanalysis:

- Display of measured data on high-definition screen.
- Possibility of “scrolling” through a determined waveform and immediately detecting its critical “moments”: it will be sufficient to “touch” a certain spot of the screen in which the measured signal is proposed to immediately obtain all necessary information in order to understand what happened in that spot and in that particular moment!

PQA820 respectively record 383 and 44 quantities which can be recalled and dragged onto the screen to be compared between each other; for example, if you are displaying the trend of voltages and you want to check for the possible presence of harmonic distortion, it will be sufficient to scroll through the list of recorded measures and drag the one relevant to harmonics to the screen. The same can be done for all other quantities: power, cosphi, current, energy, etc.

Everything can then be shared on HT Cloud, the web database created by HT to archive recordings and share them quickly with anyone around the world.

MAIN FEATURES

- AC/DC Voltage in single phase & three phase systems
- AC/DC Current in single phase & three phase systems
- Cosphi, Power factor
- Voltage imbalance (NEG%,ZERO%)
- Active, reactive, apparent power / energy and DC power
- Voltage & current harmonics up to the 49th with THD
- Voltage anomalies (dips & peaks) with resolution of 10ms(@50Hz)
- Phase sequence
- Neutral current
- Max number of simultaneous selectable parameters
- Recording with selectable integration period
- Internal memory
- Saving instant sampled values
- Summary table of main electrical parameters
- Voltage & current waveforms
- Tables of histograms of harmonics and THD%
- Voltage & current vector diagram
- Measurement category CAT IV 300V
- Measurement with use of external TA & TV (with optional accessory HT903)
- Power supply and rechargeable battery recharging
- Auto power off
- USB port for data download onto pen drive
- PC Interface provided for Windows software
- Size (LxWxH): 255 x 200 x115mm
- Weight: 700g



VEGA74 Single & Three Phase Power Quality Analyser

VEGA74 is a single-phase/three-phase network analyser capable of acquiring and recording 600 electrical parameters simultaneously. The use of VEGA74 is very simple and intuitive, thanks to the interface with color touchscreen display with icon structure.

VEGA74 is ideal for solving problems deriving from low network quality, voltage anomalies, harmonics and high energy consumption which can then become much more harmful and complex phenomena to keep under control if neglected for too long. The measurements taken can be transferred to a PC with USB or WiFi connection with a dedicated software in order to analyze the data and create printed reports.

MAIN FEATURES

- 9 Types of electrical systems
- Integration with programmable period: 2s, 5s, 10s, 30s, 1min, 5min, 10min, 15min & 30min
- Three phase power quality and energy consumption analysis
- AC/DC Voltage in single phase & three phase
- AC/DC Current in single phase & three phase
- Voltage / current waveforms
- Active, reactive, apparent power / energy and DC power
- Voltage and current harmonics up to the 49th with THD
- Cosphi, power factor
- Voltage / current vector diagram
- Voltage imbalance (NEG%, ZERO%)
- Voltage anomalies (dips & peaks) with resolution of 20ms
- Summary table of main electrical parameters
- Leakage currents recording
- Recording temperature & relative humidity
- Recording of the illuminance value
- Indication of recording duration for mains analysis
- Touchscreen colour display
- Help button on the display
- Measurement category: CATIV 300V, CATIII 350, MAX 600V between inputs
- Size (LxWxH): 225 x 165 x 75mm
- Weight: 1.2kg



HT9020 TRMS Power Harmonic Clampmeter with In-Rush Current

Professional clamp-on power quality analyzer with DYNAMIC INRUSH™ Clamp-on power quality analyzer HT9020 has been designed for measuring DC, AC+DC TRMS current up to 1000A according to CAT IV 600V in compliance with standard IEC/EN61010-1 HT9020 carries out measurements of Active, Reactive and Apparent Power and Energy, voltage and current harmonic analysis up to the 25th order with THD% calculation, in single-phase or three-phase balanced systems. It also tests phase sequence and phase conformity by 1-lead measuring method as well as detects any event related to electric motor starting currents (DYNAMIC INRUSH).

DYNAMIC INRUSH™ permits to measure inrush currents with user-defined time frames, providing measurements more reliable than standard fixed time-frame testers. The user has the chance to recall and display the measurement by applying different time frames. For example, if the user carries out a measurement using a time frame of 100 ms, he can post-process the same measurement by applying a time frame of: 16, 7, 20, 50, 100, 150, or 200 ms. This grants the utmost flexibility for each measurement, and prevents to measure again and again to get the real inrush current value. HT9020 is provided with traceable calibration certificate.

MAIN FEATURES

- TRMS
- Current measuring range 1000Amp
- Measuring count
- AC/DC Voltage
- AC/DC Current
- Resistance & continuity test with buzzer
- Frequency
- Inrush current measurement
- Data hold
- Bargraph
- Backlit display
- Peak function
- Measurement category: CATIV 600V, CATIII 1000V
- MAX/MIN function
- Auto ranging
- Auto power off
- Power supply
- Inrush current measurement
- Data hold
- Bargraph
- Backlit display
- Peak function
- AC/DC Voltage, current measurement recording
- Measurement / recording of active, reactive & apparent AC/DC power
- Measurement / recording of active, reactive & apparent AC/DC energy
- Measurement / recording of cosphi & power factor
- Measurement / recording of V-I harmonics up to the 25th with THD%
- Phase sequence and phase concordance



HT9023 has been designed to measure AC, DC AC+DC current up to 1000A in TRMS reaching CAT IV 600V and CAT III 1000V in compliance with safety standard IEC/EN61010-1. The clamp also measures DC voltage up to 1500V, AC, AC+DC voltage up to 1000V, Active, Reactive and Apparent Power, Power Factor, Energy, voltage/current harmonic analysis up to the 25th with THD% calculation in balanced single-phase or three-phase systems.

It is also possible to carry out the phase sequence test with 1-terminal. The instrument also detects the events linked to motor starting currents (Dynamic INRUSH) and allows recording each measured electric parameter over time, with the possibility of transferring data via WiFi to Android/iOS devices through the HTAnalysis App (available from late 2020) or onto PC through the TOPVIEW software. The clamp is provided with a wide graphic dot-matrix screen (128x128pxl) with backlight, in order to allow reading data even in poorly lit environments, and it is provided with an auto power off function to preserve its internal battery.

MAIN FEATURES

- TRMS
- Current measuring range 1000Amp
- Measuring count
- AC/DC Voltage
- AC/DC Voltage 1000V AC & 1500V DC
- Resistance & continuity test with buzzer
- Frequency
- AC/DC Voltage, current measurement recording
- Measurement / recording of active, reactive & apparent AC/DC energy
- Measurement / recording of cosphi & power factor
- Measurement / recording of V-I harmonics up to the 25th with THD%
- Phase sequence and phase concordance
- Inrush current measurement
- Data hold
- Bargraph
- Backlit display
- Peak function
- MAX/MIN function
- Auto ranging
- Auto power off
- Maximum clamp diameter 45mm
- Measuring counts 9999
- Backlight
- Detection of AC voltage without contact
- Relative measurement
- Datalogger and graph
- Memory for data saving
- PC/ Smartphone or tablet interface
- AC/DC voltage in single phase and three phase systems
- AC/DC current in single phase and three phase systems
- Neutral ground voltage
- Neutral current
- Max number of simultaneously selectable parameters 60
- Recording with selectable integration period 1s - 15min
- Indicative memory duration:
(In days @PI=30sec @ max number of parameters) 63 hours
- Indication of recording duration
- Internal memory 2MB
- Saving instant sampled values
- Summary table of main electrical parameters
- Voltage / current waveforms
- Measurement category: CATIV 600V, CATIII 1000V



XL421 Single Phase TRMS Current Data Logger

The XL421 is a single phase current data logger capable of performing TRMS AC current measurements and recordings up to 2500A. It has a sophisticated memory algorithm which permits the instrument to record for up to a year.

MAIN FEATURES

- Measurement range: 2 Amps - 2500 Amps
- Resolution: 1 Amp
- TRMS
- Bandwidth: 3200Hz
- Max crest factor: 3
- Sampling Rate: 64 point, 20ms for each sampling period
- Sampling period: 1s, 6s, 30s, 1min & 5min
- Memory capacity: 1MB
Approx life in days dependent on battery life:
5 days=1s, 34 days=6s, 170 days =30s
364 days=1min & 1820 days =5min
- Computer interface: RS232
- Measurement category: CATIV 600V, CATIII 1000V
- Maximum conductor size: 174mm



XL422 Three Phase TRMS Current Data Logger

The XL422 is a Data Logger capable of measuring and recording the true root mean square (TRMS) value of AC current up to 2500A in three-phase 3-wire electric systems for different applications (evaluation of load currents, rated powers of transformers, etc.).

The device has a comfortable structure with integrated flex clamp jaws which allow surrounding also big-sized cables or bars. Thanks to an advanced memory management algorithm it is possible to monitor a system even for a long time. The device starts recording with a sampling period which can be selected through software among 1, 6, 30 and 60 seconds and, when memory is almost full, the previously recorded values are "re-sampled" according to the subsequent value of the sampling period, thus freeing part of the memory; the device then goes on recording new values, using the new measuring interval. In this way, it is possible to keep the device recording up to approximately 90 days. Each recording is kept stored in the internal memory and can be downloaded and displayed on the PC always through a dedicated software.

Data Logger XL422 is also provided with a special adhesive strap which makes it possible to place it in any place in the installation where measuring is needed. The high protection rating (IP65) makes this device fully reliable also under extreme operating conditions.

MAIN FEATURES

- TRMS
- AC Voltage in single phase systems up to 600V AC
- Max number of simultaneously selectable parameters: 1
- Recording with selectable integration period:
1s, 6s, 30s, 1min & 5min
- Internal memory: 1MB
- IP65 Protection
- Measurement category: CATIV 600V, CATIII 1000V
- PC Interface provided for Windows



XL423 Single Phase TRMS Voltage Data Logger

XL423 is a Data Logger capable of measuring and recording the true root mean square (TRMS) value of AC voltage up to 600V in single-phase electric systems for different applications (evaluation of mains voltage, load unbalance, etc.). The device has a comfortable fully mobile structure complete with cables for measuring voltage with safety alligator clips. Thanks to an advanced memory management algorithm it is possible to monitor a system even for a long time.

The device starts recording with a sampling period which can be selected through software among 1, 6, 30 and 60 seconds and, when memory is almost full, the previously recorded values are "re-sampled" according to the subsequent value of the sampling period, thus freeing part of the memory; the device then goes on recording new values, using the new measuring interval. In this way, it is possible to keep the device recording up to approximately 1 year. Each recording is kept stored in the internal memory and can be downloaded and displayed on the PC always through a dedicated software. Data Logger XL423 is also provided with a special adhesive strap which makes it possible to place it in any place in the installation where measuring is needed. The high protection rating (IP65) makes this device fully reliable also under extreme operating conditions.

MAIN FEATURES

- TRMS
- AC Voltage in single phase systems up to 600V AC
- Max number of simultaneously selectable parameters: 1
- Recording with selectable integration period: 1s, 6s, 30s, 1min & 5min
- Internal memory: 1MB
- IP65 Protection
- Measurement category: CATIV 600V, CATIII 1000V
- PC Interface provided for Windows



XL424 Three Phase TRMS Voltage Data Logger

XL424 is a Data Logger capable of measuring and recording the true root mean square (TRMS) value of AC voltage up to 600V in three-phase 4-wire electric systems for different applications (evaluation of mains voltage, load unbalance, etc.). The device has a comfortable fully mobile structure complete with cables for measuring voltage with safety alligator clips. Thanks to an advanced memory management algorithm it is possible to monitor a system even for a long time.

The device starts recording with a sampling period which can be selected through software among 1, 6, 30 and 60 seconds and, when memory is almost full, the previously recorded values are "re-sampled" according to the subsequent value of the sampling period, thus freeing part of the memory; the device then goes on recording new values, using the new measuring interval. In this way, it is possible to keep the device recording up to approximately 90 days. Each recording is kept stored in the internal memory and can be downloaded and displayed on the PC always through a dedicated software. Data Logger XL424 is also provided with a special adhesive strap which makes it possible to place it in any place in the installation where measuring is needed. The high protection rating (IP65) makes this device fully reliable also under extreme operating conditions.

MAIN FEATURES

- TRMS
- AC/DC Voltage in single phase & three phase systems
- Max number of simultaneously selectable parameters: 3
- Recording with selectable integration period: 1s, 6s, 30s, 1min & 5min
- Internal memory: 1MB
- IP65 Protection
- Measurement category: CATIV 600V, CATIII 1000V
- PC Interface provided for Windows



TIS 880

Network Cable Tester with Built In De-Bug Mode

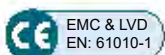
BASIC FUNCTIONS RANGE (Plaster Board)

Cable Length

Minimum 1 Metre
Maximum 300 Metre

SPECIAL FUNCTIONS

- Tests UTP Cable, STP Cable and Coaxial Cable
- Checks Continuity and Configuration of Wiring with RJ45 Plugs
- Tests for Open Circuits, Shorts, Miswires, Reversal and Split Pairs
- Shield detection, Tests a Cables Shield Integrity
- De-bug Mode
- Main and Remote Unit allow one person Testing
- Low Battery Indication
- Tests T568A, T568B 10 Base-T and Token Ring Cables
- Identification Plugs (1 & 2) supplied, optional plugs 3-8 available, TIS 880/1D



For Video Demonstration
[CLICK HERE](#)

TIS 888

Multi-function Tone Generator, Cable Tracker and Continuity Tester

SPECIAL FUNCTIONS

- Tracks the cables or wires and diagnoses the breaking point
- Receives the tone signal on the cables or wires (telephone lines)
- Checks the condition of the working telephone line (clear, ringing or busy)
- Checks continuity of the cables or wires
- Sends a Single Solid or a Dual Alternating Tone
- Complete with Zipped Padded Case



01274 752 407



01274 870 175



sales@tis-tic.co.uk

Please contact your local wholesaler for pricing

T2000 20A AC Earth Ground Clampmeter

T2000 is a professional clamp specially developed to evaluate resistance of earth rods with no need to disconnect any part of the system (STAKELESS METHOD).

The inner part of the device is made of 2 jaws, one for current reading and the other for voltage generation. The voltage jaws generate a potential (E) on the loop during resistance (R) measurement. A current (I) is consequently generated on the loop and is measured by the current jaws. Based on the value of parameters E and I, the instrument displays the resistance R value calculated as their ratio. The value measured by the device can be used in case the single rods do not influence each other. T2000 also measures AC current up to 20A and leakage current with resolution 0.1mA. This device complies with standard IEC/EN61010-1 in CAT IV 300V, CAT III 600V and it is the ideal solution for measurements to be carried out both in private and in industrial environments.

MAIN FEATURES

- TRMS
- Measuring range: 0.01Ω - 1.2kΩ
- Direct measurement on earth probes without any cable interruption
- Measurement of leakage current on earth systems: 0.1mA - 20A
- LCD Display
- Backlight
- Auto power off
- Internal memory for measured data 99 locations
- CAT IV 600V, CAT III 1000V
- Size (LxWxH): 293 x 105 x 54mm



T2100 TRMS Earth Resistance Clampmeter Compatible With The TIS MFT-PRO+

T2100 is a professional clamp specially developed to evaluate resistance of earth rods with no need to disconnect any part of the system.

The inner part of the device is made of 2 jaws, one for current reading and the other for voltage generation. The voltage jaws generate a potential (E) on the loop during resistance (R) measurement. A current (I) is consequently generated on the loop and is measured by the current jaws. Based on the value of parameters E and I, the instrument displays the resistance R value calculated as their ratio. The value measured by the device can be used in case the single rods do not influence each other. This device complies with standard IEC/EN61010-1 in CAT III 600V, CAT IV 300V and it is the ideal solution for measurements to be carried out both in private and in industrial environments.

MAIN FEATURES

- TRMS
- Direct measurement on earth probes without any cable interruption
- Serial interface RS-232 for connection to the TIS MFTPRO+
- LCD Display
- Backlight
- Auto power off
- Internal memory for measured data 99 locations
- CAT IV 600V, CAT III 1000V
- Size (LxWxH): 293 x 90 x 66mm



HT7051 5KVA Professional Insulation Tester

HT7051 has been developed to measure insulation resistance with test voltage programmable up to 5kVDC and measuring range up to 10TΩ which makes it very useful in any industrial application (tests on electric machines, power transformers, electric cables, electric boards, generic devices, etc.) within BT.

The device allows carrying out tests in FIX (with fixed test voltages), ADJUST (programmable test voltage) and RAMP mode (programmable test voltage and application time with selection of 3 available ramp types) which define a kind of operation suitable for any situation. Measurement of parameters such as Polarization Index (PI) and Dielectric Absorption Ratio (DAR), are duration tests which allow defining the quality of insulation.

HT7051 is supplied with NiMH rechargeable battery with integrated battery charger, which allows for a remarkable duration when carrying out measurements, it is provided with internal memory for saving measurements and it is also possible to connect it to the PC to download the measured results. The whole structure has been inserted into a comfortable and resistant transport case, solid and safe for "on-site" use.

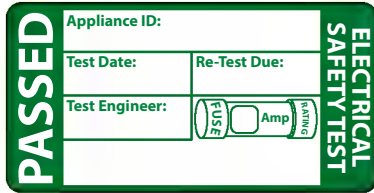
MAIN FEATURES

- DC test voltage measuring range 100V - 5KV
- Insulation resistance measuring range 0.01MΩ - 9.99TΩ
- Test with programmable ramp steps of 25V DC
- Programmable test timer 5s - 100min
- Setting of measurement limit value
- Measurement of polarisation index (P.I)
- Measurement of dielectric absorption ratio (D.A.R)
- Measurement of dielectric discharge ratio (D.D)
- Measurement of discharge capacity
- Automatic discharge of target
- Measurement of AC / DC voltage up to 600V
- RS232 / optical USB interface for transferring of data to a PC



TIS 1612-500

Standard Passed Labels



49mm x 25mm - Pack of 500

TIS 1612/4ED

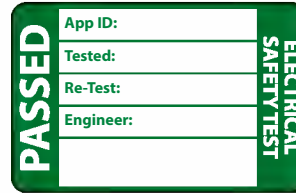
4th Edition Passed Labels



49mm x 25mm - Pack of 500

TIS 1614-500

Medium Passed Labels



39mm x 25mm - Pack of 500

TIS 1616-500

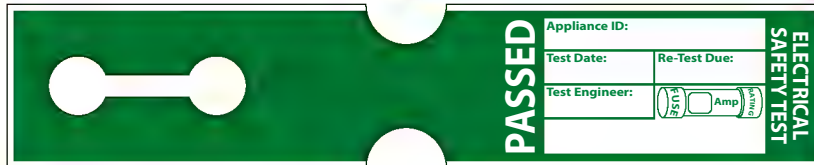
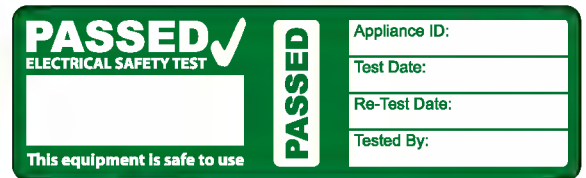
Plug Top Passed Labels



23mm x 25mm - Pack of 500

TIS 1616-250

Tuff Tag Passed Labels

125mm x 25mm
Pack of 250**4th Edition Tuff Tag Labels
Also Available***Tuff Tag Failed Labels
also available at same price***TIS 1620-250 Passed Pat Wrap Labels**

75mm x 23mm - Pack of 250

TIS 1613-200

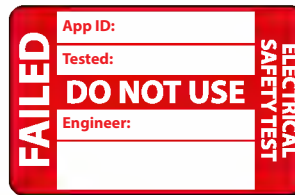
Standard Failed Labels



49mm x 25mm - Pack of 200

TIS 1615-200

Medium Failed Labels



39mm x 25mm - Pack of 200

TIS 1617-200

Plug Top Failed Labels



23mm x 25mm - Pack of 500

Electrical Danger Labels**TIS VL230V**

49mm x 25mm - Pack of 250



TIS VL110V



TIS VL220V



TIS VL240V



TIS VL400V



TIS VL440V



TIS VL400VB



TIS VL3300V



TIS VL6600V



TIS VL11KV



TIS VL22KV



TIS VL33KV



TIS VLHV



TIS VLDEVE



TIS WLBO



TIS WLIE



TIS CLMS



TIS CLSEC



TIS WLLB



TIS WLFOC



TIS WLAS



TIS WLMTOS



TIS WLFEQ



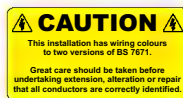
TIS CLLC



TIS CLEDR



TIS WLFAF



TIS CWIR250

OTHER LABELS AVAILABLE ON REQUEST

TIS SK1 Electricians Starter Kit

A perfect starter kit for any electrician packed with a complete safe isolation kit including a Voltage & Continuity Tester, Proving Unit, Lockoff Kit & Appropriate Carry Cases, Voltstick & Audible Socket Tester.

We have also included an Ergo stripping tool, 160mm side cutters and the every popular Electrical Installation 5-1 pliers all packed in a bespoke Knipex Bag.

KIT CONTENTS

- KN 00 21 12 LE-00 Knipex Bag
- KN 16 95 01 SB Knipex Ergo Strip
- KN 13 86 200 SB Knipex 5-1 Electrical Installation Pliers
- KN 70 06 160 SB 160mm Diagonal Side Cutters
- TIS 850SIKIT TIS Voltage & Continuity Complete Safe Isolation Kit
- TIS 934 TIS Audible Voltstick 50V - 1000V
- TIS 1000 Audible Socket Tester



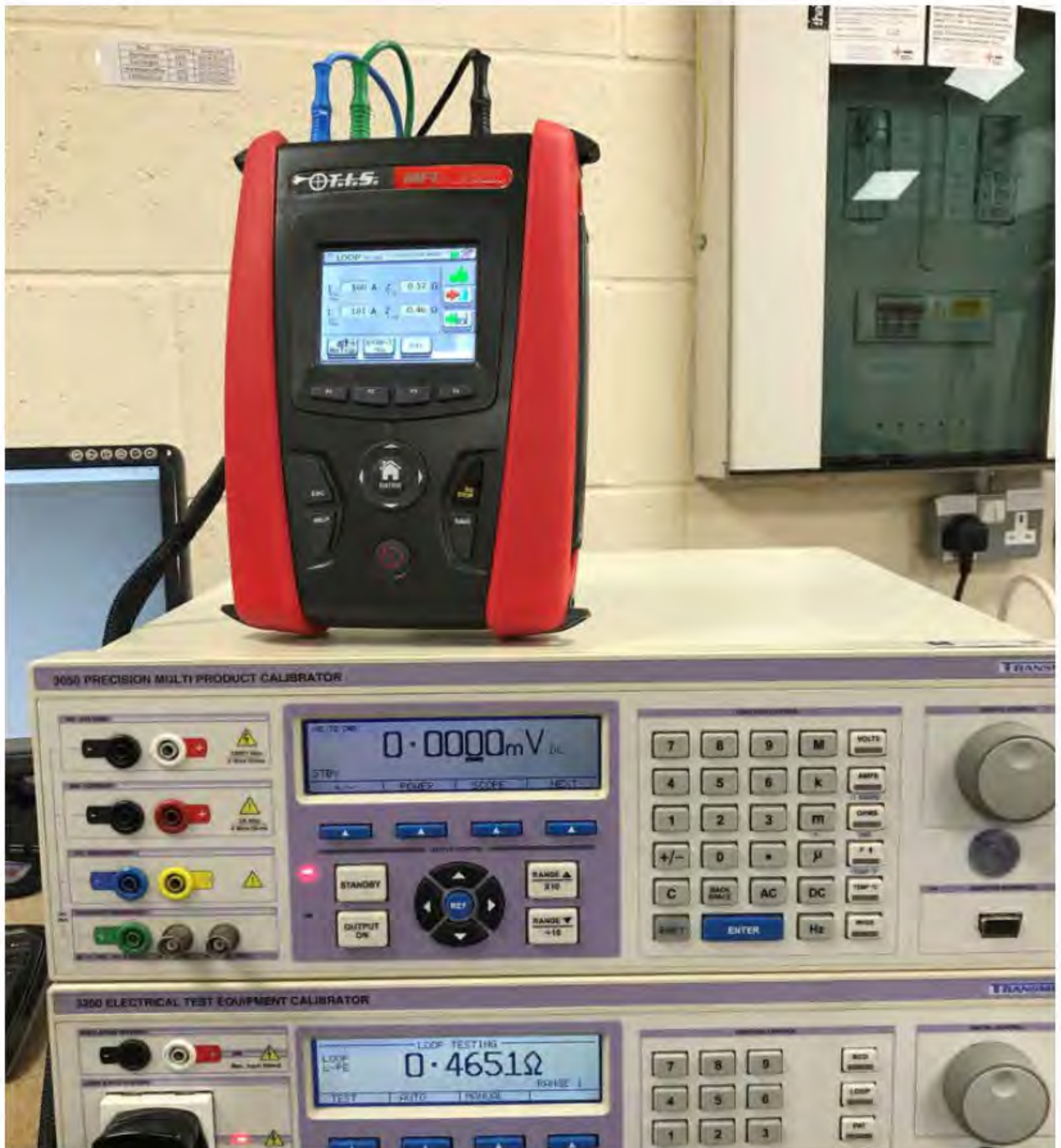
Did you know?
We have a full range of
Electrical Knipex tools. All in stock.





Test Instrument Calibrations

Instruments must be calibrated in line with the manufacturers recommendations and the requirements of BS EN 61557 and in line with the New IET Legislation, which in most instances is a 12 month re-calibration cycle.



Our Calibration Service

Our service includes full certified calibration, traceable to UKAS Standards and ISO 9001; together with a computerised recall service which will log all your instruments by type, manufacturer, serial number and remind you of when they are due for re-calibration.

We are able to calibrate most instruments from any manufacturer including:

- Insulation, Loop Or RCD Testers
- Multi-Functional All In One Testers
- Portable Appliance Testers
- Digital Thermometers
- Multimeters
- Microwave Testers
- Earth Resistance Testers
- Sound Level Meters
- Phase Rotation Testers
- Check Boxes
- Light Meters & Voltage Testers
- Torque Screwdrivers
- Plus Much More - Please Ask!

**Mini On-Site Calibration Service
and On Site Calibration Service available**



Telephone: 01274 752 407

Email: sales@tis-tic.co.uk

Web: www.testinstrumentsolutions.co.uk

Test Instrument Solutions

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