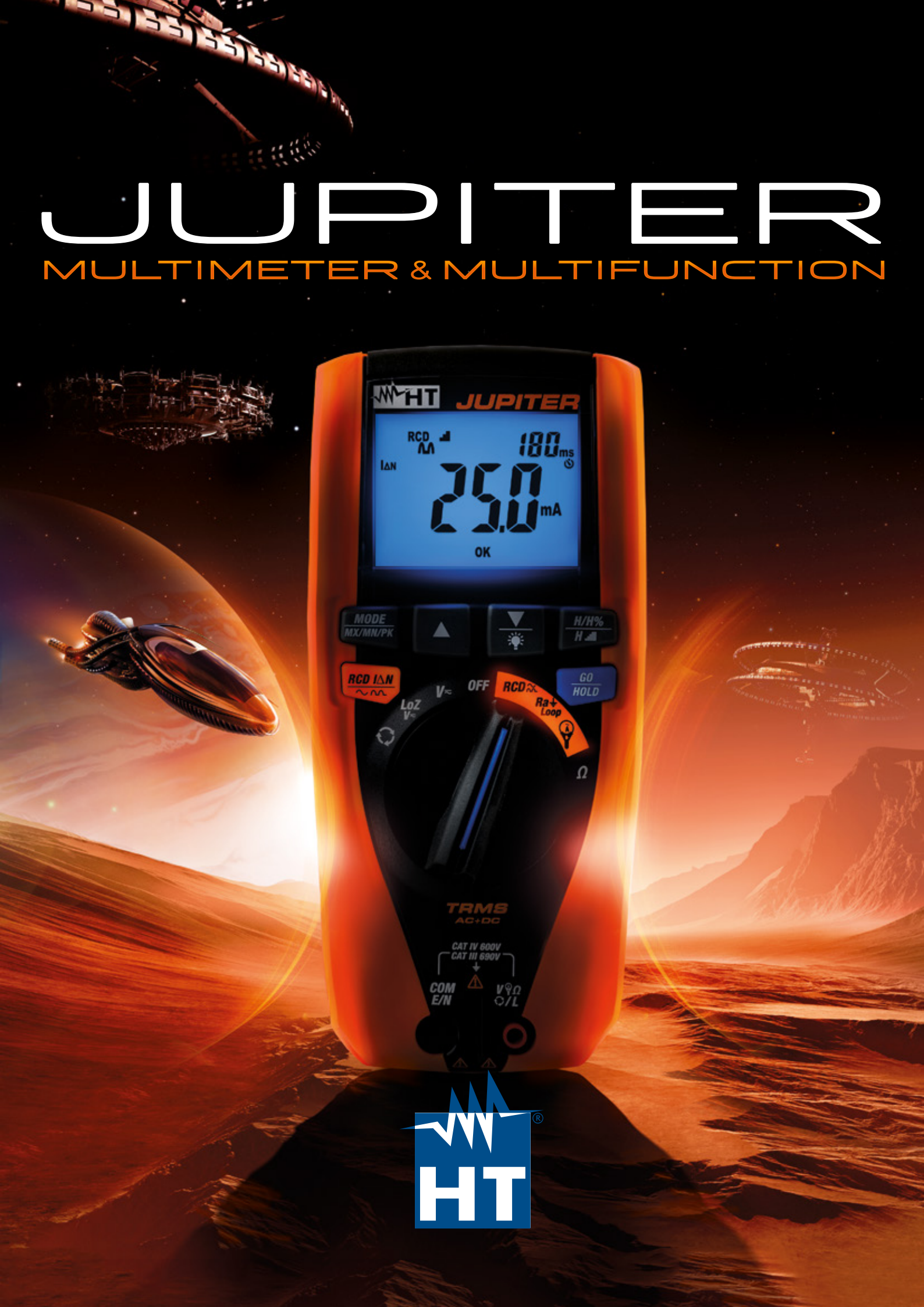
JUPITER

MULTIMETER & MULTIFUNCTION



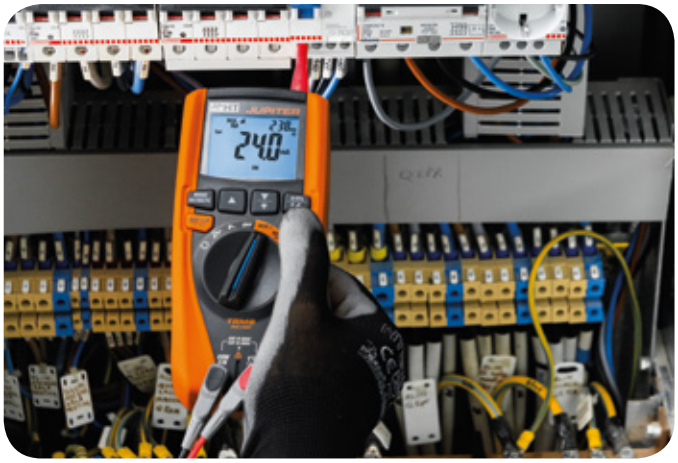
You might think I am just a multimeter...

690V | TRMS AC+DC | LoZ | CAT IV 600V | autoRange

- **Autorange** measurements with automatic **AC/DC** detection.
- **DC**, **AC TRMS**, **AC+DC TRMS voltage** up to **690V**.
- **Low impedance voltage input** to eliminate ghost voltage readings.
- **DC**, **AC TRMS**, **AC+DC TRMS current** by means of external transducer.
- **Frequency** of voltage and/or current.
- **Resistance and continuity with buzzer**.
- **MIN/MAX/PEAK/HOLD** functions.
- **6000 counts**.

TRMS AC+DC current measurement.

AC current measurement with flexible transducer F3000U.



RCD **tripping time and current** measurement.

Current **harmonic** measurement.

My name is Jupiter. Why to choose me? Just because I am out of this world.

- I am **the only multimeter** capable of testing the **electrical installation safety**.
- I **compare** each measure with the **limits** provided by the **guidelines**, so to provide a clear **OK** / **NOT OK** result.
- My functions are available on **high-end instruments** only.
- I allow a wide range of external transducers to measure **AC TRMS**, **DC**, **AC+DC**, and **inrush current**.
- I am **Portable**, **Rugged** and **Compact**.


HT
JUPITER
RCD
180ms
IΔN
25.0mA
OK
MODE
MX/MN/PK
H/H%
H
RCD IΔN
GO
HOLD
V≂
OFF
RCD
LoZ
V≂
Ra
Loop
Ω
TRMS
AC+DC
CAT IV 600V
CAT III 690V
COM
E/N
V Ω
/L

... but I have a multifunction soul!

RCD tripping time and current: full control!

RCD tripping time and current.

- I can measure the **tripping time of RCDs** type **A** and **AC** up to **300mA**** and the **tripping current of RCDs** type **AC** up to **30mA** (**RAMP** test).
- My **AUTO function** makes everything more immediate: my display will show you the **6 consecutive tests (x½, x1, x2, x5, 0°, 180°)** for a full RCD check.
- I will show you an unequivocal **response OK** or **NOT OK**.

I'm Jupiter... and I'll show you the Earth.

Non-trip earth ground resistance and Line (Loop) impedance.

- In **TT** systems I measure the **non-trip earth ground resistance**.
- I can identify **incorrect connections** of the protection cable, I can detect dangerous voltages on the metal masses and I constantly keep under control the **contact voltage** in order to prevent dangerous conditions due to an inefficient earthing system.
- I measure the **Line-to-Neutral**, **Line-to-Line** and **Line-to-Ground impedance** and I calculate **the prospective short-circuit/fault current**.

Harmonics have no secret for me.

Harmonics and THD%.

- I measure **voltage and current harmonics** showing both numeric and percentage terms.
- I measure the **THDV%**, and the **THDI%**
- My function **H_2O** (Higher Harmonic Ordering) sorts harmonics **showing highest values first**, so you can easily size filters and protections.

I don't follow a current, I follow them all!

Current measurement.

- I can measure **DC**, **AC TRMS**, **AC+DC TRMS** current by means of external transducer up to **3000A**.
- With the optional transducer **HT96U***** I can measure the **leakage current**.
- I can select the time base to measure the **dynamic inrush current** of motors and loads (DIRC function).

Everything in its right... sequence.

Phase sequence.

- I need just **one lead** to detect the **phase sequence**.

** 30mA, 100mA, 300mA. *** Optional accessory.

Ghost voltage cancellation.

Non-trip earth ground resistance measurement.

Leakage current measurement.

Measurement comparison: 3.9A: with RMS clamp - 4.7A: with TRMS clamp
6.1A: correct reading with AC+DC TRMS clamp.

Inrush Current measurement.

Standard accessories

- **C2065** Three wire cable Red, Black, Green with Shuko plug
- **4324-2** Pair of test tips Red/Black 2/4mm straight banana
- **YABAT0001HT0** Alkaline battery 1.5V, type AAA, IEC LR03, 4 pcs
- **YABRS0002HT0** Carrying bag
- **YAMUM0066HT0** User manual on CD-ROM
- **YAMUM0065HT0** Quick reference guide
- **Calibration certificate** ISO9000

The standard accessories can be different depend on countries.

Optional accessories

- **F3000U** AC flexible clamp with 30/300/3000A full scales
- **HT96U*** AC current clamp with 1/100/1000A full scales
- **HT97U*** AC current clamp with 10/100/1000A AC full scales
- **HT98U*** DC current clamp with 1000A full scale
- **HT4006** AC/DC current clamp with 40/400A full scales
- **NOCANBA** Hypertac-to-banana adapter

* Adapter NOCANBA required.

Technical specifications

DC Voltage
Measurement range: 0.0V ÷ 690.0V
Resolution: 0.1V
Accuracy: ±(0.5%reading + 2digits)

AC TRMS, DC, AC+DC TRMS, LoZ Voltage
Measurement range: 0.5V ÷ 690.0V
Frequency range: 32Hz ÷ 1kHz
Resolution: 0.1V
Accuracy: ±(0.5%reading + 2digits)

AC TRMS Current with Flexible clamp F3000U
Measurement range: 1A ÷ 3000A
Basic resolution: 0.01A
Accuracy: ±(0.5%reading + 2digits)

AC TRMS, DC, AC+DC TRMS Current with Standard clamp
Measurement range: 1mV ÷ 1000mV
Resolution: 1mV
Accuracy: ±(0.5%reading + 2digits)

Inrush current (DIRC) - Flexible clamp F3000U
Measurement range: 1A ÷ 3000A
Basic resolution: 0.01A
Frequency range: 42.5Hz ÷ 69Hz
Accuracy: ±(2.0%reading + 2digits)
Peak response time: 1ms
Max RMS response times: 16.6ms, 20ms, 50ms, 100ms, 150ms, 175ms, 200ms

Inrush current (DIRC) - Standard clamp
Measurement range: 1mV ÷ 1000mV
Resolution: 1mV
Frequency range: 42.5Hz ÷ 69Hz
Accuracy: ±(2.0%reading + 2digits)
Peak response time: 1ms
Max RMS response times: 16.6ms, 20ms, 50ms, 100ms, 150ms, 175ms, 200ms

Resistance and Continuity test
Measurement range: 0.0Ω ÷ 1999Ω
Basic resolution: 0.1Ω
Accuracy: ±(1.0%reading + 5digits)
Buzzer sound: R<30Ω

Voltage / Current Harmonics
Harmonic order: DC, 1st ÷ 25th + THD%
Frequency range: 42.5Hz ÷ 69Hz
Resolution: 0.1V / 0.1A
Basic accuracy: ±(5.0%reading + 10digits)

Phase rotation test with 1-wire method
Measurement range: 100V ÷ 690V
Frequency range: 42.5Hz ÷ 69Hz

Test on RCD protection devices
RCD type: AC, A, General
Trip-out time measurement (ms) / Trip-out current measurement (mA)
L-PE voltage range: 100V ÷ 690V
Frequency range: 42.5Hz ÷ 69Hz
Trip-out time measurement: IΔN selectable among 30mA, 100mA, 300mA
Trip-out current measurement for IΔN of 30mA

Overall earth resistance without RCD tripping
L-PE voltage range: 100V ÷ 690V
Frequency range: 42.5Hz ÷ 69Hz
Test current: <15mA
Measurement range: 1Ω ÷ 1999Ω
Resolution: 1Ω
Accuracy: 5.0%reading + 3Ω

L-N, L-L, L-PE Loop / Line Impedance
L-PE, L-N voltage range: 100V ÷ 690V
Frequency range: 42.5Hz ÷ 69Hz
Test current: 100mA
Measurement range: 0.1Ω ÷ 199.9Ω
Basic accuracy: ±(5.0%reading + 3digits)

General specifications

General characteristics
Instrument safety: IEC/EN61010-1, IEC/EN61010-2-030, IEC/EN61010-2-033
EMC: IEC/EN61326-1
RCD test: IEC/EN61557-6
Loop L-L, L-N, L-PE, Ra test: IEC/EN61557-3
Phase rotation test: IEC/EN 61557-7
Insulation: double insulation
Pollution degree: 2
Measurement category: CAT IV 600V, CAT III 690V to ground and between inputs

Mechanical characteristics
Dimensions (L x W x H): 175 x 85 x 55mm
Weight (batteries included): 420g
Mechanical protection: IP40

Power supply
Battery type: 4x1.5V alkaline type AAA IEC LR03
Auto Power OFF: after15min of idleness

Display
Display type: 4 LCD, max 9999 counts, sign, decimal point backlight and bargraph, polarity indication
Frequency rate: 2times/s

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