

AUTOMATION AND SWITCHGEAR

HTPRO

Professionals are born. Or made.

The best HT instruments for daily use in the automation and switchgear industry







40 YEARS MARKING OUT SUCCESSFUL LINES

Research & Development

An office, the throbbing heart of HT Italia, a touchstone for every business strategy, the starting point of every new creation, tasked with supporting ideas and converting them into innovative, high-performance instruments. A perpetual fire that fuels a continuously evolving **company**, a present-day that is invariably also the future.

Head office

3.800 square metres

The warehouse



Italian sales network



AGENCIES

REGIONAL SALES AGENTS



MANAGERS

Calibrations and repairs

For over 25 years, HT ITALIA has designed and built all circuit Testing and Analysis equipment inhouse, allowing it to provide highly skilled technical support.

Today, with a view to providing an increasingly efficient service in line with Client expectations and thanks to an agreement with TRESCAL, HT ITALIA hosts its own separate, climate-controlled laboratory for the issue of Calibration Reports in accordance with ISO 9001, as well as Accredited Certificates (ACCREDIA) in accordance with ISO/ IEC 17025.

Distributors

Foreign sales network



Manned points of sale

1160

REGIONAL



EUROPEAN BRANCHES

Catalogued measuring instruments

more than



STORYTELLING

Concern and consideration for doing things right, a wealth of experience acquired over the years, an innate sense for innovation, a Future-oriented project cultivated day by day have all made **HT Italia one of the most important and exemplary companies in the Market for electrical measuring instruments** and a key **point of reference** for those, who, over time, have wanted or needed to approach this world from which they demand only the very best.

Latest-generation technology, state-of-the-art infrastructure, unique industry expertise, people, a team, the backbone that year after year, has guaranteed our success and allowed continuous growth on a global scale, from every point of view. Putting forward our expertise, managing and transforming it into exclusive, high-performance instruments, catering to every specific need, is the challenge that has guided HT for more than 40 years and a means of addressing change, **investing in the skills** and trust of an increasingly demanding and evolved target market.

A modus operandi ensuring the **added value** of a continuously evolving organisation.

Certifications





Certified laboratory LAT174 of TRESCAL MS at the HT-Italia head office

SAFETY FIRST

Electrical measuring instruments, prior still to fulfilling their purpose, must consider operator safety as a basic requirement in terms of protection against temporary overvoltages that may arise due to the presence of complex electrical loads, shortcircuit situations, lightening strikes, etc.

To this end, the international standard IEC 61010-1, harmonised in Europe as EN 61010-1, has set out specific requirements that must be satisfied by electrical equipment designed for LV measurements (<1000VAC), creating four "Overvoltage Categories" that define the level of protection against the voltage transients of each instrument, depending on its distance from the power source.

Instruments belonging to the highest category require greater internal protection insofar as they can operate close to the source. A short description is provided below:



TYPE OF MEASUREMENT

Measurements on circuits not directly connected to the distribution network

Measurements on circuits directly connected to the low-voltage installation

Measurements on installations inside buildings

Measurements on a source of a low-voltage installation

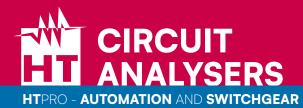
APPLICATION

Protected electronic equipment, measurements not derived from mains

Household appliances, hand-held tools and the like

Distribution panels, cable harnesses, switches, fixed installation sockets, electric motors, industrial equip.

Electricity meters, measurements on primary overcurrent protection devices, ripple control units



There are two main standards governing the field of automation and switchgear: 61439-1, which regulates both automation and distribution switchgear, and 60204-1, which covers the machine manufacturing category.

In order to obtain CE certification, all automation and distribution switchgear solutions must necessarily be tested with compliant instrumentation according to EN 61439-1, which sets out a series of electrical tests to be performed on the equipment.

Similar tests must also be carried out on the machinery in order to be certified according to EN 60204-1, which is similar to 61439-1 bar a few differences.

In addition to this, HT ITALIA also offers instrumentation for measuring and generating process signals, as well as clamps and multimeters specifically for automation. **FULLTEST3** an instrument that complies with both EN 61439-1 and EN 60204, FULLTEST allows all mandatory and optional electrical tests to be carried out in compliance with the afore-mentioned standards.

It features high-tech peripherals for exporting the saved data and includes the possibility to create guided test sequences to speed up the testing process, making it the ideal instrument for every panel and machine builder looking to certify their products.

FULLTEST3

MULTIFUNCTIONAL INSTRUMENT



APPLICATIONS

For safety testing on machinery and switchgear in accordance with IEC/EN60204-1 and IEC/EN61439-1



FEATURES

A single instrument for switchgear and machine certification according to 61439-1 with testing of continuity up to 25 A, insulation up to 1000 V DC and dielectric strength up to 5100 V AC, professional report creation via TOPVIEW software, AUTOTEST function, calibration certificate included







HT8051 / **HT8100** HT ITALIA process calibrators allow professionals to measure and generate 0-10 V and 4-20 mA signals with high precision, a key parameter in this field.



METEL **HP080510**

PROFESSIONAL PROCESS CALIBRATOR

APPLICATIONS

- Process signal simulation
- Fault detection
- Control loop testing

FEATURES

TRMS, AC/DC voltage max 10VDC, AC/DC current max 24mADC, Transducer output current measurement, Simulation of an external transducer, Loop power supply with 24V minimum voltage, Selectable ramp generation, Backlit LCD display, Auto power-off



METEL **HV008100**

PROFESSIONAL PROCESS MUTLIMETER/CALIBRATOR

APPLICATIONS

- Process signal simulation
- Fault detection
- Control loop testing

FEATURES

TRMS, AC/DC voltage max 10VDC, AC/DC current max 24mADC, Transducer output current measurement, Simulation of an external transducer, Loop power supply with 24V minimum voltage, Selectable ramp generation, Backlit LCD display, Auto power-off





HT64 / HT63 / HT9025 HT64 provides a graphical display of the measured electrical quantities and the possibility to measure 4-20 mA. This last function is also available in the HT63, which has 60,000 counts.

The HT9025 AC/DC clamp, on the other hand, allows accurate measurements even in the presence of harmonic distortions thanks to the VFD and AC+DC function.



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DIGITAL MULTIMETER



APPLICATIONS

High-performance TRMS multimeters with graphical display of measured quantities and high precision



TRMS measurements up to 60,000 counts, 4-20 mA process signal control, graphical display of measured quantities, current measurements with supplied AC/DC current clamp



METEL HP009025



PROFESSIONAL CURRENT CLAMP



APPLICATIONS

For high AC and DC current measurements and ideal for applications with distortions and harmonics, especially in the automation field



FEATURES

AC/DC current up to 1000A, DC voltage up to 1500V, inrush current measurement, LoZ low-impedance voltage input, resistance and continuity, capacitance and diode test, temperature with K-probe, colour display, external transducer input for measurements up to 3000A





THT80 / **THT200** / **THT300** In the automation industry, we typically find electrical and mechanical components that, over time, present a risk of failure with consequent downtime and inconvenience.

Thermal imaging allows preventive checks on electrical and mechanical components like switches, electronic circuit boards and motors, thus preventing them from becoming a problem.

Implementation Implemen

METEL **HN000080**

COMPACT TOUCH-SCREEN THERMAL IMAGER



Inspection and maintenance on components at a distance of maximum 1.5 m and temperatures up to 550°C **OK** CERTIFICATO DI CALIBRAZIONE

FEATURES

PictureinPicture function, AutoFusion function, thermal sensitivity: <0.05°C @ 30°C / 50mK. Compatible with HT Pro Camera app







METEL HN000200

THT**200**

HIGH-TECH, PROFESSIONAL TOUCH-SCREEN THERMAL IMAGERS

160x120	TEMPERATURE RANGE	FIELD OF VIEW
PIXEL	-20°÷650° ℃	20.7°×15.6°

APPLICATIONS

Maintenance on mechanical and electrical components including switchgear, switches, busbars, kiosks, motors and electrical cables.



FEATURES

Picture in Picture function, AutoFusion function, thermal sensitivity: <0.05°C @ 30°C / 50mK



METEL HN000300

THT**300**

HIGH-TECH, PROFESSIONAL TOUCH-SCREEN THERMAL IMAGERS



APPLICATIONS

Maintenance on mechanical and electrical components including switchgear, switches, busbars, kiosks, motors and electrical cables.



FEATURES

Picture in Picture function, AutoFusion function, thermal sensitivity: <0.05°C (a) 30°C / 50mK



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