



**RAILWAY INDUSTRY**

# HTPRO

**Professionals are born. Or made.**

The best HT instruments  
for daily use in the  
industrial railway 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

15.000  
cubic metres

## Italian sales network

15 AGENCIES  
65 REGIONAL SALES AGENTS  
5 AREA MANAGERS

## Calibrations and repairs

For over 25 years, HT ITALIA has designed and built all circuit Testing and Analysis equipment in-house, 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 TRESKAL, 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

186

## Manned points of sale

1160

## Catalogued measuring instruments

more than  
680

## Foreign sales network

70 DISTRIBUTORS

3 REGIONAL MANAGERS

2 EUROPEAN BRANCHES



# 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 TRESICAL 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, short-circuit situations, lightning 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	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



# MULTIMETERS

HTPRO - RAILWAY INDUSTRY



METEL HR000005

## IRONMETER

INDESTRUCTIBLE MULTIMETER

→ TRMS AC/DC CAT III 600V

### APPLICATIONS

Situations with a high risk of damaging and/or dropping the instrument

### FEATURES

Indestructible TRMS multimeter, built-in LED torch, 600 V 10 A



METEL HR00064P

## HT63P | HT64P

DIGITAL MULTIMETER

→ TRMS AC+DC 6,000 COUNTS CAT IV 600V

### APPLICATIONS

TRMS AC+DC measurements, 4-20 mA readout, graphical display of measured quantities

### FEATURES

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 HR000701

## HT701

PROFESSIONAL MULTIMETER

→ TRMS MΩ CAT IV 600V

### APPLICATIONS

TRMS measurements and insulation tests with voltage up to 1000V

### FEATURES

Insulation test at 50,100,250,500,1000 V DC, TRMS measurements, magnetic hanger supplied

# CURRENT CLAMPS

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METEL HP03010C | HP03013E

## HT3010C HT3013C

CURRENT CLAMP

→ TRMS AC/DC  
AC/DC CURRENT MAX  
400 A  
CAT III  
600V

### APPLICATIONS

Current measurements in installations and switchgear up to 400 A AC/DC

### FEATURES

Calibration certificate included, TRMS measurements up to 400 A AC/DC, voltage up to 600 V



METEL HP009025

## HT9025

PROFESSIONAL CURRENT CLAMP

→ TRMS AC+DC  
AC/DC CURRENT MAX  
1000 A  
25<sup>th</sup> HARMONIC ORDER  
CAT IV  
600V

### APPLICATIONS

Testing and maintenance on installations with strong current and voltage distortion

**VFD**  
MEASUREMENTS  
DOWNSTREAM  
OF INVERTER

### FEATURES

Voltage up to 1500 VDC, current up to 1000 A AC/DC, VFD (Variable Frequency Driver) function



METEL HP009023

## HT9023

PROFESSIONAL CURRENT CLAMP

→ TRMS AC+DC  
AC/DC CURRENT MAX  
1000 A  
25<sup>th</sup> HARMONIC ORDER  
CAT IV  
600V

### APPLICATIONS

Single-phase network analysis, harmonics measurement, large cable diameter

### FEATURES

Power measurements (P,Q,S), harmonics up to 25th, voltage 1000V AC and 1500V DC, current up to 1000 A AC+DC, inrush current measurement with data recording

# CURRENT CLAMPS

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METEL **HA079PRO**

## HT79

CURRENT CLAMP FOR  
LEAKAGE CURRENT MEASUREMENT

CAT IV 600V → TRMS AC/DC  
CURRENT

### APPLICATIONS

Micro/milliamp currents and  
leakage currents

### FEATURES

Currents from 0.1 mA to 20 A,  
diameter 23 mm, LINESPLITTER  
supplied



METEL **HP030000**

## F3000

CURRENT CLAMP  
WITH FLEXIBLE TOROID

CAT IV 600V → TRMS

### APPLICATIONS

Measurements in hard-  
to-reach and poorly  
lit locations such as  
switchgear and kiosks

### FEATURES

Flexible toroid for measurements up  
to 3000 A AC, auto power-off  
and autorange, backlighting, max  
clampable cable 110mm

# THERMAL IMAGERS

HTPRO - RAILWAY INDUSTRY



METEL **HN000200** | **HN000300** | **HNTHT400**  
**HN050000** | **HN006000**

## THT200 | THT300 THT400 | THT500 | THT600

HIGH-TECH, PROFESSIONAL TOUCH-SCREEN THERMAL IMAGERS



### APPLICATIONS

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



### FEATURES

Resolution 120x90 pixels (THT200/THT500), 384x288 (THT300/THT600) and 640x480 (THT300), temperature range -20 to +650, advanced analysis functions, Wi-Fi, thermal image overlay on visible image, wide field of view, strap+ rangefinder+ built-in LED torch (THT500/THT600)

METEL **HN000080**

## THT80

COMPACT TOUCH-SCREEN  
THERMAL IMAGER

**120x90** TEMPERATURE RANGE  
PIXEL **-20° ÷ 550° C**

### APPLICATIONS

Inspection and maintenance on components at a distance of maximum 1.5 m and temperatures up to 550°



### FEATURES

120x90 resolution, field of view 50x37°, thermal image overlay on visual image, data export via cable or Wi-Fi to dedicated software or APP

# TEST INSTRUMENTS

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METEL HROOJUPI

## JUPITER

INSTALLATION AND EARTH TESTING INSTRUMENTS



→ **TRMS** Earth resistance **CAT IV 600V**

### APPLICATIONS

Continuity, insulation and earth resistance testing of electrical installations according to 64-8 on RCDs up to 300 mA

### FEATURES

Testing of continuity and earthing, insulation up to 500 V DC (M75L), RCD tripping up to 300 mA type A and AC, calibration certificate included

METEL HV00519S | HV5036PR

## COMBI519S MACROTESTG3S

INSTALLATION AND EARTH TESTING INSTRUMENTS



**AC, A, B, B+, F**  
RCD

### APPLICATIONS

Complete testing of electrical installations according to 64-8

### FEATURES

Testing of continuity, insulation up to 1000 V DC, earth resistance, fault loop impedance / RCD type A, AC, B, F with test current up to 1 A or 10 A (MACROTESTG3) on split toroid circuit breakers, earth resistance with voltammetric technique (MACROTESTG3), cyclic phase direction, calibration certificate included

# INSTALLATION AND EARTH TESTING

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METEL HV000071

## M71

INSTALLATION AND EARTH TESTING INSTRUMENTS

Earth resistance

### APPLICATIONS

Earth resistance measurement with stakes

### FEATURES

Earth measurement with voltammetric technique with 2 and 3 wires



METEL HN500000

## HT5000

BURIED CABLE AND METAL PIPES LOCATOR

### APPLICATIONS

Detection of buried components like pipes, metal elements, electrical cables and depth measurements

### FEATURES

Inductive coupling with 33kHz signal via antenna, direct 33kHz coupling with external accessories, selectable transmission power, intermittent or continuous signal, passive search mode without transmitter, automatic depth measurement, manual or automatic sensitivity setting, headphone socket for noisy environments

# INSULATION TESTERS

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## METEL HROO0NEP NEPTUNE

INSULATION  
TESTER

Insulation  
Tester  
1000 V

CAT IV  
600V

### APPLICATIONS

Insulation testing with voltage up to 1000 V on cables, motors, transformers

### FEATURES

Test voltage range 250 to 1000 V DC, continuity of protective conductors up to 200 mA, current measurements with supplied clamp, calibration certificate included



## METEL HV007051 HT7051

INSULATION  
TESTER

### APPLICATIONS

Insulation testing with programmable voltage up to 5000 V DC and measuring range up to 10 T ohms, ideal for LV industrial applications (testing of electrical machines, power transformers, electrical cables, switchgear, general devices, etc.)

### FEATURES

Test voltage range from 100 V to 5000 V DC, programmable test timer from 5s to 100 min, internal memory for up to 700 measurements, calibration certificate included

# CIRCUIT ANALYSERS

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METEL HV000820

## PQA820

SINGLE/THREE-PHASE  
SELF-POWERED  
CIRCUIT ANALYSERS



### APPLICATIONS

Single/three-phase circuit analysis with current up to 1000 A

### FEATURES

IP65 enclosure case, mains powered, 4 voltage and 4 current inputs, voltage dip and spike recording, integrated Wi-Fi for data export via PC software, calibration certificate included

METEL HV000740

## VEGA74

SINGLE/THREE-PHASE  
CIRCUIT ANALYSERS



### APPLICATIONS

Analysis of three-phase circuits with currents up to 3000 A and real-time graphic and numerical display of measured quantities, measurements on impedance boxes and leakage current recording in the mA range with HT96U

### FEATURES

Recording and acquisition of 600 electrical parameters, possibility to record leakage currents (with optional HT 96U clamp), 9 types of electrical systems available, integrated Wi-Fi for data export via PC software, calibration certificate included

# CIRCUIT ANALYSERS

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METEL HV000060

## GSC60

MULTIFUNCTIONAL SAFETY TESTING INSTRUMENT

TOUCH SCREEN SYSTEM



### APPLICATIONS

A single instrument for all IEC 64-8 tests (continuity, insulation, RCD testing up to 1 A and earth resistance with stakes) and single/three-phase circuit analysis up to 3000 A AC

### FEATURES

All tests for low-voltage systems, recording and acquisition of 600 electrical parameters, possibility to record leakage currents (with optional HT 96U clamp), 9 types of electrical systems available, integrated Wi-Fi for data export via PC software and HT Analysis 2 APP



METEL HV000003

## FULLTEST3

MULTIFUNCTIONAL SAFETY TESTING INSTRUMENT

TOUCH SCREEN SYSTEM



### APPLICATIONS

Continuity measurements on earth conductors up to 25 A and dielectric strength tests on electrical components up to 5100 V AC

### 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





RAILWAY INDUSTRY

# HTPRO



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