

## **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 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

186

70

DISTRIBUTORS

Manned points of sale

3

REGIONAL MANAGERS

1160

2

EUROPEAN BRANCHES

Catalogued measuring instruments

more than 680



## **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, short-circuit 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

## **MULTIMETERS**

HTPRO - RAILWAY INDUSTRY





METEL **HROOOOO5** 

## **IRON**METER

INDESTRUCTIBLE MULTIMETER

→ TRMS

CAT III

#### **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 HROOO64P

## HT63P | HT64P

**DIGITAL MULTIMETER** 

→ TRMS

**6,000** COUNTS

CAT IV **600**V

#### **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

 $\rightarrow$  TRMS  $M\Omega$   $\neq$  CATIVE 600

#### **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

HTPRO - RAILWAY INDUSTRY





METEL HP03010C | HP03013E

## HT3010C HT3013C

**CURRENT CLAMP** 





CAT III **600** V

#### **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** 

HT**9025** 

PROFESSIONAL CURRENT CLAMP









#### **APPLICATIONS**

Testing and maintenance on installations with strong current and voltage distortion



#### **FEATURES**

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



METEL **HP009023** HT**9023** 

PROFESSIONAL CURRENT CLAMP







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

→ 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

→ TRMS

#### **APPLICATIONS**

Measurements in hardto-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

## THT**200** | THT**300** THT**400** | THT**500** | THT**600**

HIGH-TECH. PROFESSIONAL TOUCH-SCREEN THERMAL IMAGERS





#### **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

**787** 

COMPACT TOUCH-SCREEN THERMAL IMAGER

120x90

TEMPERATURE RANGE
-20°÷550°€

#### **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

HTPRO - RAILWAY INDUSTRY





## 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

#### **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

### **M**71

INSTALLATION AND EARTH TESTING INSTRUMENTS

Earth resistance

#### **APPLICATIONS**

Earth resistance measurement with stakes

#### **FEATURES**

Earth measurement with voltammetric technique with 2 and 3 wires



#### **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 HROOONEP

## **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

### HT**7051**

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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### **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

### **GSC**60

MULTIFUNCTIONAL SAFETY TESTING INSTRUMENT









#### **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



### **FULLTEST**3

MULTIFUNCTIONAL SAFETY TESTING INSTRUMENT









#### **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

## **HT**PRO





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