



SUN

SolarUnbelievableNews



For daily application in photovoltaic systems



Energy needs to be controlled. By HT.

Solar energy production plants represent a crucial step towards a **virtuous** and **sustainable** future.

A future that is constantly evolving and needs to be cared for, controlled, managed, and guaranteed in an accurate and professional manner.

For these purposes, **HT Italia** provides you with optimal and **efficient instruments** for overseeing and **maintaining photovoltaic plants**. This includes **monitoring efficiency** and conducting quality **analyses**, all accessible via **Wi-Fi** directly on your devices.

Energy needs to be monitored, and HT knows how to do it.



FUNCTION

GFL

Identification and localization of the fault

INSULATION

1500 VDC

For photovoltaic systems

Tests in

DUAL

MODE

Localization of the faulty pole

ORDER CODE **HV0PVISO**

PV-ISOTEST

MULTIFUNCTION INSTRUMENT FOR COMMISSIONING, TESTING THE ELECTRIC SAFETY AND SEARCHING FOR FAULTS

- › Insulation measurement up to 1500VDC
- › Localization of the faulty module through the new GFL function
- › Insulation measuring modes DUAL and TIMER for checking the state of deterioration of the insulation
- › Continuity of protective conductors with 200mA



SEE THE
TECHNICAL
DATA SHEET



WATCH
THE VIDEO
TUTORIAL

HT Photovol



AUTO TEST

INSULATION MAX
1000 V

ORDER CODE **HV00PVCS**

PVCHECKS

MULTIFUNCTION INSTRUMENT FOR
COMMISSIONING TESTS AND
PERFORMANCE VERIFICATION

- › Insulation measurement up to 1000VDC
- › Open-circuit voltage measurement up to 1000V DC
- › Short-circuit current measurement up to 15A at 1000VDC
- › Continuity of protective conductors with 200mA
- › Polarity
- › AUTO SEQUENCE
- › Performance logging of PV strings



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TECHNICAL
DATA SHEET

NEW



GFL FUNCTION

**1500V
40A**

DUAL MODE Test

MONO-FACIAL BI-FACIAL

ORDER CODE **HV00PVPR**

PVCHECKS-PRO

COMMISSIONING TESTER
OF PV INSTALLATIONS
UP TO 1500V / 40A

- › A single GO-key stroke to perform all commissioning tests
- › Seamless mode to test in sequence all strings of a combiner box by a single GO-key stroke
- › Testing of single and bi-facial modules (even high efficiency) up to 1500V / 40A
- › All commissioning tests (continuity, polarity, Voc, Isc, insulation) on live installations
- › GFL - Ground Fault Locator to detect the precise position of the lack of insulation



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TECHNICAL
DATA SHEET

taic systems

NEW



**1500V
40A**

ORDER CODE **HV0IV600**

IV-600

I-V CURVE TRACER FOR MAINTENANCE AND TROUBLESHOOTING OF PHOTOVOLTAIC SYSTEMS UP TO 1500V AND 40A

- › I-V curve tracing of modules and strings **up to 1500V** and **40A**
- › Measurement of front-side and rear-side solar radiation for mono- and **bi-facial** module testing, even high efficiency
- › Measurement of **open-circuit voltage** and **short-circuit current** Voc/Isc
- › Database of **PV module performance**
- › **Automatic acquisition** of the **cell calibration** value (by using suitable cells)



SEE THE
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DATA SHEET



WIFI
CONNECTION

I-V CURVE
MAX

15A

**AUTO
TEST**

MAX
1500 V

ORDER CODE **HV000IVE**

SOLAR I-Ve

I-V CURVE TRACING OF PHOTOVOLTAIC MODULES AND STRINGS + EFFICIENCY OF THE PHOTOVOLTAIC SYSTEM

- › Measurement of inverter efficiency in single-string single-phase systems
- › I-V curve up to 1500V and 10A or up to 1000V and 15A
- › Power measurement of a module or a string
- › Open-circuit voltage (Voc) up to 1500V
- › Short-circuit current (Isc) up to 15A
- › Environmental and Cell temperature
- › No distance limit for environmental measurements through remote unit SOLAR-02
- › AUTOSTART to run the test automatically
- › WiFi connection to smartphones and tablets



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WIFI
CONNECTION

I-V CURVE

15A

MAX
1000 V

ORDER CODE **HV00400W**

I-V400w

I-V CURVE TRACING
ON PHOTOVOLTAIC MODULES
AND STRINGS

- › I-V curve up to 1000V and 15A
- › Power measurement of a module or a string
- › Open-circuit voltage (Voc) up to 1000V
- › Short-circuit current (Isc) up to 15A
- › Solar radiation measurement
- › Environmental and Cell temperature
- › No distance limit for environmental measurements through remote unit SOLAR-02
- › AUTOSTART to run the test automatically
- › WiFi connection to smartphones and tablets



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WIFI
CONNECTION

I-V CURVE
MAX

15A

MAX
1500 V

ORDER CODE **HV00500W**

I-V500w

I-V CURVE TRACING OF MODULES
AND STRINGS

- › I-V curve up to 1500V and 10A or up to 1000V and 15A
- › Power measurement of a module or a string
- › Open-circuit voltage (Voc) up to 1500V
- › Short-circuit current (Isc) up to 15A
- › Radiation measurement
- › Environmental and Cell temperature measurement
- › No distance limit for environmental measurements through remote unit SOLAR-02
- › AUTOSTART to run the tests automatically
- › WiFi connection to smartphones and tablets



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ORDER CODE **HNTHT400**

THT400

HIGH RESOLUTION
TOUCH SCREEN
INFRARED CAMERA

640x480
PIXEL

TEMPERATURE RANGE
-20°÷550°C

FIELD OF VIEW
31.9°x25.7°



CALIBRATION
REPORT



SEE THE
TECHNICAL
DATA SHEET



ORDER CODE **HN000300**

THT300

TOUCH SCREEN
INFRARED CAMERA

384x288
PIXEL

TEMPERATURE RANGE
-20°÷650°C

FIELD OF VIEW
41.5°x31.1°



CALIBRATION
REPORT



SEE THE
TECHNICAL
DATA SHEET

HT Photovol



ORDER CODE **HN000120**

THT120

TOUCH SCREEN
INFRARED CAMERA

120x120
PIXEL

TEMPERATURE RANGE
-20°÷650°C

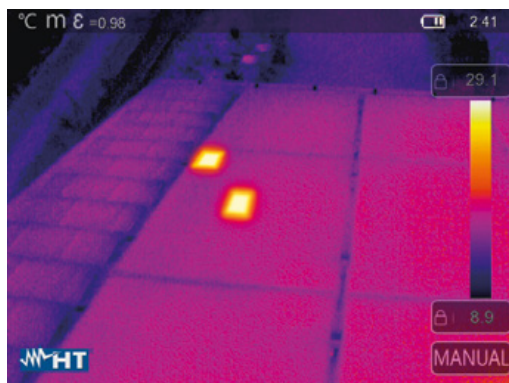
FIELD OF VIEW
15.6°x15.6°



CALIBRATION
REPORT



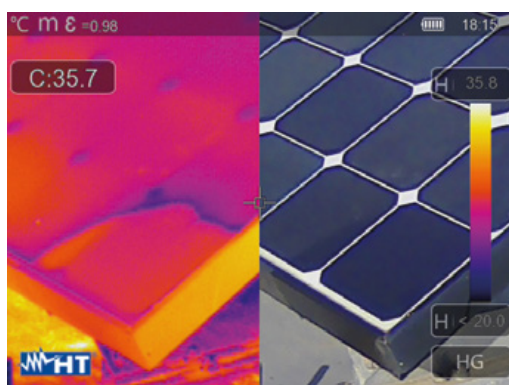
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Photovoltaic system inspection

Thanks to the thermographic inspection of photovoltaic systems, hot spots and loose connections can be easily detected.

Picture: hot spots shot with THT300.



PV panels encapsulation

During long-term outdoor exposure, once moisture penetrates a module, it can condense and increase corrosion rates, significantly reducing the performance of the module. High resolution infrared cameras easily spot encapsulant failures.

Picture: encapsulant failure shot with THT600.

taic svsystems

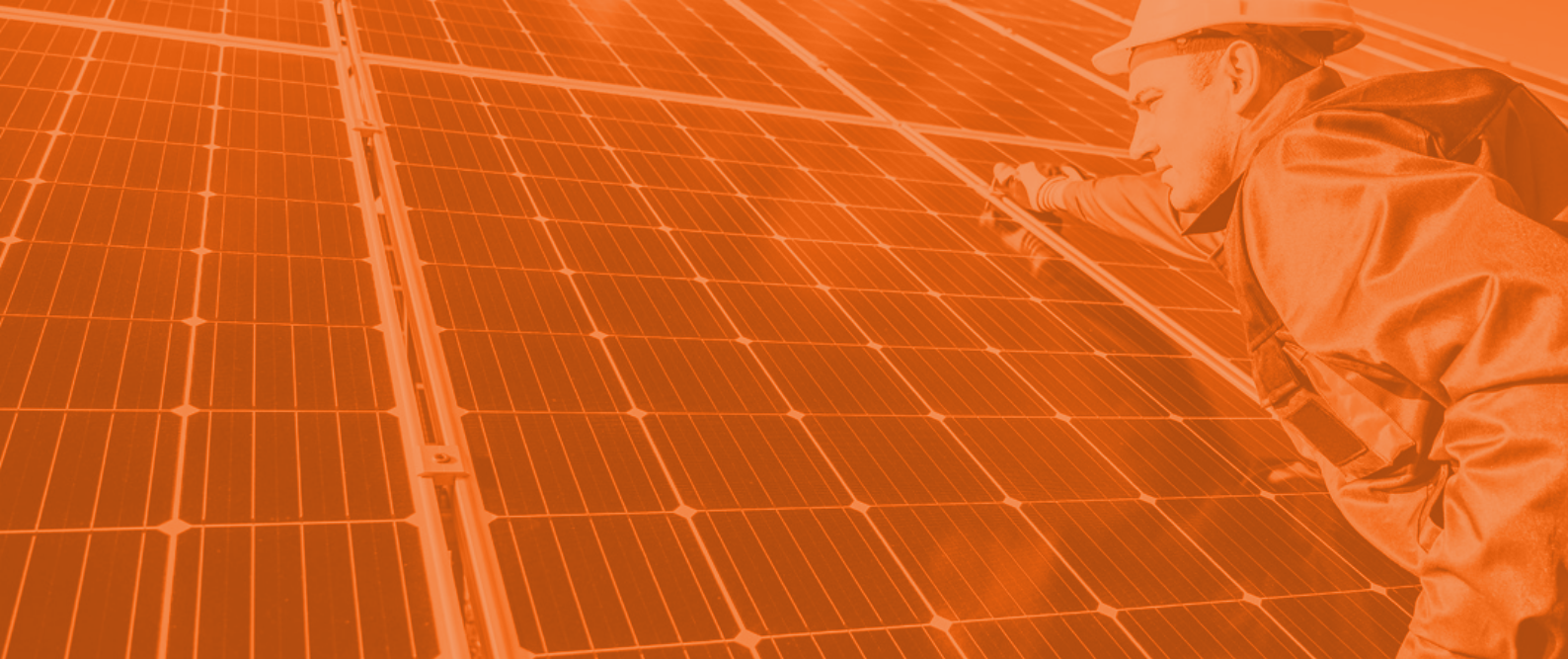


ACCESSORIES

	SOLAR I-Ve	I-V400w	I-V500w	PVCHECKs	PV-ISOTEST	PVCHECKs PRO	IV-600
TOPVIEW2006 PC Windows software + USB/optical cable	S	S	S	S	S	-	-
PT300N Temperature probe	S	O	O	O	-	-	-
PT305 PT1000 probe for module temperature measurement	-	-	-	-	-	O	S
SOLAR-02 Remote unit	S	O	O	O	-	-	-
SOLAR03 Remote unit	-	-	-	-	-	O	S
HT305 Reference cell for irradiance measurement with module mount	-	-	-	-	-	O	S
KIT2PRO15 Set of 2 cables banana-banana 3 meter long + 2 alligator clips (red and black) - 2 units	-	-	-	-	-	-	S
KIT4PRO15 Set of 4 cables banana-banana 4mm + 4 alligator clips (red, green, blu and black)	-	-	-	-	-	S	-
KITGSC4 Set of 4 cables + 4 alligator clips	S	S	S	S	S	-	-
KITPVMC4150 Set of 2 adapters male 4mm banana to MC4 compatible connector, 3 meter long	-	-	-	-	-	S	S
KITPVMC3 Set of 2 adapters with MC3 connectors	S	S	S	-	-	-	-
KITPVMC4 Set of 2 adapters with MC4 connectors	S	S	S	-	-	-	-
KITPCMC3 Set of 2 adapters with MC3 connectors	-	-	-	S	O	-	-
KITPCMC4 Set of 2 adapters with MC4 connectors	-	-	-	S	S	-	-
KITPVEXT25M 25 meter green and black extension cord	O	O	O	O	-	-	-
KITKELVIN Twin-cable set for AUTO SEQUENCE tests	O	O	O	-	-	-	-
KITK2TIPS15 Set of 2 PV4 compatible plugs	-	-	-	-	-	-	O
KITPVPROEXT20 2 banana male to female extension cables 20m (green and black)	-	-	-	-	-	O	O
606-IECN Connector with magnetic tip	O	O	O	O	O	-	-
HT304N Reference cell	S	S	S	O	-	-	-
M304 Mechanical inclinometer	S	S	S	O	-	O	S
HT4004 Standard 10-100A DC clamp, 30 mm	S	-	-	O	-	-	-
HT98U Standard 1000A DC clamp, 50 mm	O	-	-	O	-	-	-
HP30D1 Standard 1000A DC clamp, 83 mm	O	-	-	O	-	-	-
HT4005K Standard 200A AC clamp, 40 mm	S	-	-	-	-	-	-
HT4005N Standard 5-100A AC clamp, 20 mm	O	-	-	-	-	-	-
HT96U Standard 1-100-1000A AC clamp, 54 mm	O	-	-	-	-	-	-
HT97U Standard 10-100-1000A AC clamp, 54 mm	O	-	-	-	-	-	-
HP30C2 Standard 200-2000A AC clamp, 70 mm	O	-	-	-	-	-	-
HP30C3 Standard 3000A AC clamp, 70 mm	O	-	-	-	-	-	-
BORSA2051 Soft carrying bag	-	-	-	S	-	-	-
VA500 Rigid carrying case	S	S	S	O	-	-	-
VA507 Rigid carrying case	-	-	-	O	S	S	-
SP-2002 Magnetic strip for HT Instruments	-	-	-	-	-	-	S
SP-2003 Shoulder strap	-	-	-	-	-	-	S
SP-0400 Free hands kit	O	O	O	O	O	-	-
SP-0500 Free hands kit	O	O	O	O	O	-	-
SP-5100 Set of straps	-	-	-	-	-	S	-
CF832 32GB Memory card	-	-	-	-	-	-	S
A0061 External power charger with shuko-plug cable	-	-	-	-	-	-	S
C2006 Optical/U connection cable	-	-	-	-	-	S	-
C2010 Cable UsbA-UsbC 1,5mt	-	-	-	-	-	-	S
YABAT0003000 Rechargeable battery NiMH, 1.2V, type AA - 18 units	-	-	-	-	-	S (6pz)	S (18pz)
YABAT0004001 External battery charger for AA batteries	-	-	-	-	-	S	S
BORSAZAINO Professional HT backpack	-	-	-	-	-	-	S
ISO9000 test report Provided with I-V600, SOLAR-03 and HT305	-	-	-	-	-	S	S

- : Not compatible | S: Standard | O: Optional





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