SUN

SolarUnbelievableNews

NEW

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

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

**SEE THE
TECHNICAL
DATA SHEET**

NEW

GFL
FUNCTION

**1500V
40A**

DUAL
MODE
Test

**MONO-FACIAL
BI-FACIAL**

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

**SEE THE
TECHNICAL
DATA SHEET**

taic systems

NEW

1500V
40A

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 TECHNICAL DATA SHEET

Wi Fi

WIFI
CONNECTION

I-V CURVE
MAX

15A

AUTO
TEST

MAX
1500 V

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

SEE THE TECHNICAL DATA SHEET

HT Photovol

Wi Fi

WIFI
CONNECTION

I-V CURVE
15A

MAX
1000 V

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

**SEE THE
TECHNICAL
DATA SHEET**

Wi Fi

WIFI
CONNECTION

I-V CURVE
MAX
15A

MAX
1500 V

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

**SEE THE
TECHNICAL
DATA SHEET**

taic svstems

THT**400**

HIGH RESOLUTION
TOUCH SCREEN
INFRARED CAMERA

640x480
PIXEL

TEMPERATURE RANGE
-20°÷550°C

FIELD OF VIEW
31.9°✕**25.7°**

OK
CALIBRATION REPORT

SEE THE TECHNICAL DATA SHEET

THT**300**

TOUCH SCREEN
INFRARED CAMERA

384x288
PIXEL

TEMPERATURE RANGE
-20°÷650°C

FIELD OF VIEW
41.5°✕**31.1°**

OK
CALIBRATION REPORT

SEE THE TECHNICAL DATA SHEET

HT Photovol

THT**120**

TOUCH SCREEN
INFRARED CAMERA

120x120
PIXEL

TEMPERATURE RANGE
-20°÷650°C

FIELD OF VIEW
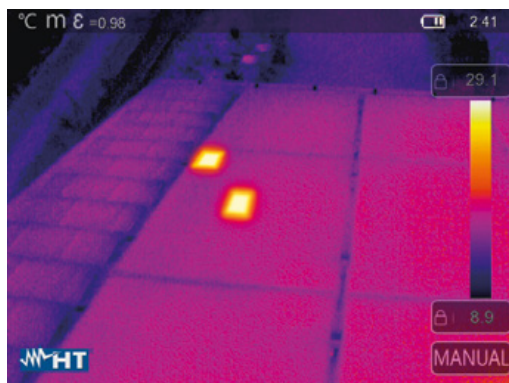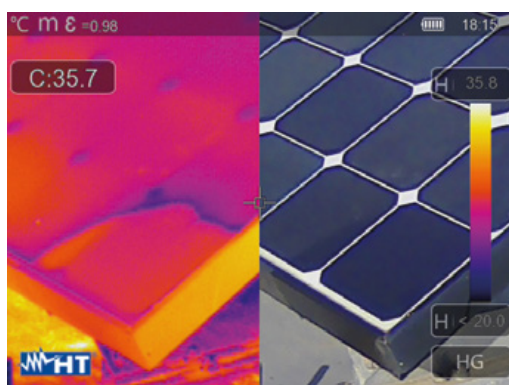**15.6°**×**15.6°**

ƏK
**CALIBRATION
REPORT**

**SEE THE
TECHNICAL
DATA SHEET**

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.

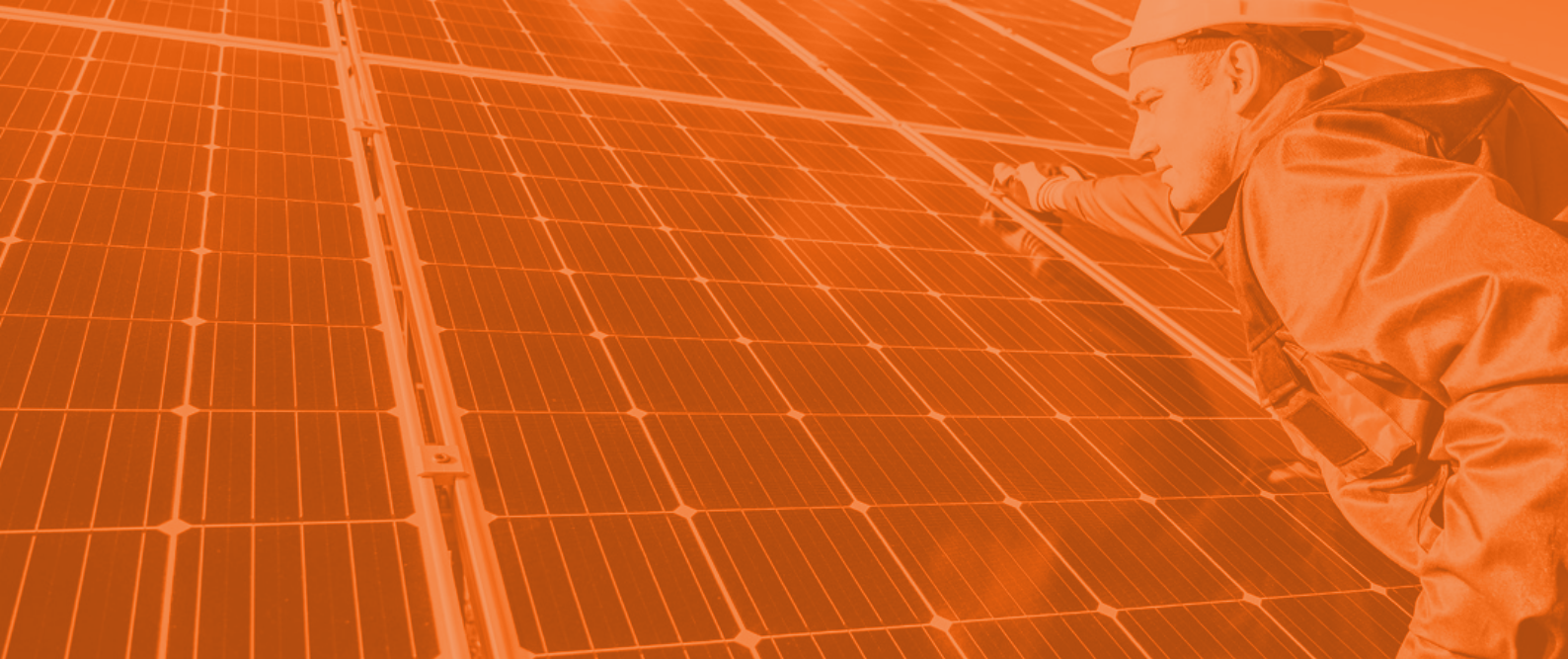*Picture: encapsulant failure shot with THT600.*

taic systems

ACCESSORIES

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	-	-
KITPVMC415O 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 - 10 units	-	-	-	-	-	S (6pz)	S (10pz)
YABAT0004001 External battery charger for AA batteries	-	-	-	-	-	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