SOLAR300N is a multifunction device for verification of single-phase and three-phase PV systems, efficiency and power quality analysis in compliance with Standard EN50160.

**Main features**
- Display: Colour touchscreen with adjustable brightness
- Power supply: Rechargeable Li-Ion, 3.7V battery
- Internal memory: 15MB (duration 1 month @ IP-15mm, 251 parameters)
- External memory: Compact Flash (CF) card
- PC interface: USB 2.0
- Safety: IEC/EN61010-1
- Insulation: double insulation
- Pollution level: 2
- Measurement category: CAT IV 600V (to earth), CAT III 1000V (between inputs)
- Unbalance: IEC/EN61010-4-7
- Power quality: IEC/EN61010
- Flicker: IEC/EN61010-4-15
- Reference standard: IEC/EN61010-4-30 Class B
- Size: 235x165x75mm
- Weight (batteries included): 1kg

**Accessories provided**
- SOLAR02 Remote unit for Irradiation and Temperature
- KIT800 Set of 5 cables + 5 alligator clips
- HT4005K Standard 200A AC clamp, diameter 40mm (3pcs)
- HT4004N Standard 10-100A DC clamp, diameter 32mm
- HT504N Sensor for irradiation measurement
- PT300N PT1000 probe for PV modules temperature
- A0055 External AC/DC battery charger power supply 230V 50/60Hz
- YB60100300H1 Rechargeable Li-Ion battery
- PT400 Touch-screen pen
- TOPVIEW2007 Windows software + USB C2007 cable
- VAS00 Rigid carrying case
- User Manual
- Quick guide
- IS09000 calibration certificate

(*) Please check accessory line to find the correct power adapter for your country.

**Optional accessories**
- MPP300 Accessory for (AC) three-phase efficiency verification up to (3MPPT)
- HT4005N Standard AC 0÷5A, 0÷100A clamp, diameter 20mm
- HT96U Standard 1-100-1000A AC clamp, diameter 54mm
- HT97U Standard 10-100-1000A AC clamp, diameter 54mm
- HP30C2 Standard 200-2000A AC clamp, diameter 70mm
- HP30C3 Standard 3000A AC clamp, diameter 70mm
- HT86U Standard 1000A DC clamp, diameter 50mm
- HP30D1 Standard clamp, diameter 83mm 1000A DC
- HP30C2 Standard 10-1000A AC clamp, diameter 77mm
- HP30D1 Standard 10-1000A AC clamp, diameter 77mm
- HP30C3 Standard 200-2000A AC clamp, diameter 77mm
- HP30D1 Standard 200-2000A AC clamp, diameter 77mm
- HP30C3 Standard 3000A AC clamp, diameter 77mm
- HT97U Standard 1-100-1000A AC clamp, diameter 54mm
- HT96U Standard 1000A DC clamp, diameter 50mm
- MCR800 Compact flash card reader

**SOLAR300N testing result**
- for your country

**Functions**
- Efficiency measurements of the photovoltaic system
  - DC/AC TRMS voltage (single-phase and three-phase)
  - DC/AC TRMS current (single-phase and three-phase)
  - DC/AC active power (single-phase and three-phase)
  - Power factor cosθ (single-phase and three-phase)
  - DC/AC active power (single-phase and three-phase)
  - DC/AC TRMS current (single-phase and three-phase)
  - DC/AC TRMS voltage (single-phase and three-phase)
  - Efficiency measurements of the photovoltaic system

**Analysis of power and energy consumption**
- Periodic recording of power parameters with programmable PI
- Analysis of power and energy consumption
  - Recording of voltage and current harmonics (up to the 49th)
  - Recording of voltage anomalies (dips, peaks)
  - Recording of flickers
  - Measurement of energy consumption
- Analysis of recordings
  - Harmonics
  - Analysis of recordings
  - Measurement of energy consumption
  - Flicker
  - Voltage anomalies and spikes
  - Inrush currents
  - Vectors and waveforms

**Accessories**
- Remote unit SOLAR02 for measuring irradiation and temperature
- Remote unit SOLAR02 for measuring irradiation and temperature
- Panel Temperature [°C] and environmental Temperature  [°C]
- Power factor cosθ (single-phase and three-phase)
- DC/AC active power (single-phase and three-phase)
- DC/AC TRMS current (single-phase and three-phase)
- DC/AC TRMS voltage (single-phase and three-phase)
- Efficiency measurements of the photovoltaic system

**Precautions**
- (*) Please check accessory line to find the correct power adapter for your country.

**Technical specifications**
- Measurement range:
  - Voltage: 0.1V to 1000V
  - Current: 0.01mA to 100A
- Power quality:
  - CAT IV 600V (to earth)
  - CAT III 1000V (between inputs)
- Measurement accuracy:
  - Voltage: ±0.1%
  - Current: ±0.05%
- Frequency range:
  - 50/60Hz
- Power supply:
  - Rechargeable Li-Ion, 3.7V battery
- Battery capacity:
  - 7.4V, 2600mAh
- Display:
  - Colour touchscreen with adjustable brightness
- Operating temperature:
  - 0°C to 40°C
- Storage temperature:
  - -20°C to 60°C
- Humidity:
  - 10% to 90% non-condensing
- Weight:
  - 1kg
- Dimensions:
  - 235x165x75mm