HT304 Reference cell for irradiation measurements on Silicon SINGLE and POLY Crystalline PV modules

WARNINGS ABOUT USE OF REFERENCE CELL HT304

- HT304 is a passive sensor and do not require any power supply
- Avoid exposing the instrument to mechanical shock paying additional attention to the glass
- Protect the glass against any contact with abrasive surfaces
- Do not apply any voltage to instrument's outputs
- Install the sensor in position clear of obstructions that may introduce shading or reflections effects by distorting the sensor reading
- Always check the parallelism between the sensor and the photovoltaic module under consideration (error max ± 2 °). The non-perfect parallelism between the sensor and the PV module surface could affect the outcome of the measure
- The usage of the stirrup is highly recommended. Fix the stirrup in a central position of the PV module edge. The stirrup is provide of a fixing screw compatible with holes placed on the back side of the PV module frame
- Once positioned the stirrup, insert the sensor into its holder with its connectors oriented downside (if possible) in order to avoid shadowing effects
- Expose the sensor to the test conditions (radiation temperature, inclination) at least 1 minute before performing the readings in order to avoid working with the sensor not yet in steady state

1. TECHNICAL SPECIFICATIONS

Irradiation

Range [W/m^2]	Accuracy (*)
50 ÷ 1400	±3.0% of readings

(*) Accuracy is grant under the following conditions:

- Temperature: -20 ÷ 50°C ; Incidence angle: 90° ± 25° ; Air mass (AM): 1.5

2. GENERAL SPECIFICATIONS

Available reference cells: MONO Crystalline and MULTI Crystalline Silicon

Guidelines

Safety: IEC/EN 61010-1
Technical literature: IEC/EN 61187
Calibration: IEC/EN 60904-2
Mechanical protection: IP65 in compliance with IEC/EN 60529
Pollution degree: 2

Mechanical characteristics

Dimensions (LxWxH): 140x90x32 mm
Weight: 30g

Environmental conditions

Working temperature: -20°C ÷ 50°C
Storage temperature: -20°C ÷ 60°C

This instrument complies with the requirements of the European Low Voltage Directive 2006/95/CE (LVD) and EMC Directive 2004/108/CE