

SOLAR02 Remote unit for irradiation and temperature measurements on PV plants





1. TECHNICAL SPECIFICATIONS

Accuracy is defined to reference conditions: temperature 23°C, humidity <80%RH

Irradiation

Range [W/m ²]	Resolution [W/m ²]	Accuracy
0 ÷ 1400	1 + INT (100 * 0.1/K)	±(1.0%rdg + INT(1000 * 0.1/K))

K = sensitivity of the probe used to measure irradiation (expressed in mV/kW/m² or in μV/W/m²)

Probe sensitivity	Range [mV]	Resolution [mV]	Uncertainty
K<10	0.00 ÷ 15.00	0.01	±(1.0%rdg+0.1mV)
K≥10	0.00 ÷ 65.00	0.02	

Temperature (with PT300N probe)

Range [°C]	Resolution [°C]	Accuracy
-20.0 ÷ 99.9	0.1	±(1.0%rdg + 1°C)

Tilting angle

Range [°]	Resolution [°]	Accuracy
1 ÷ 90	1	±(1.0%rdg + 1°)

2. GENERAL SPECIFICATIONS

Display: LCD Custom, 4 dgt (2000 counts) + decimal comma and point

Power supply

Internal batteries: 4x1.5V alkaline type AAA LR03
Battery life: approx 480 in continuous operation
AutopowerOFF: after 5 minutes of idleness (in independent mode)

Input connectors

USB port: USB 2.0
PYRA/CELL inputs: type Hypertac

Internal memory

Autonomy: approx 1.5 hours (@ PI master meter = 5s)

Mechanical characteristics

Dimensions: 120(L)x 65(W) x 35(H)mm ; 5(L)x3(W)x1(H) “
Weight (included batteries): 215g (8 ounces)

Environmental conditions

Operating temperature: 0° ÷ 40°C
Relative operating humidity: < 80%RH
Storage temperature: -10 ÷ 60°C
Storage humidity: <80%RH