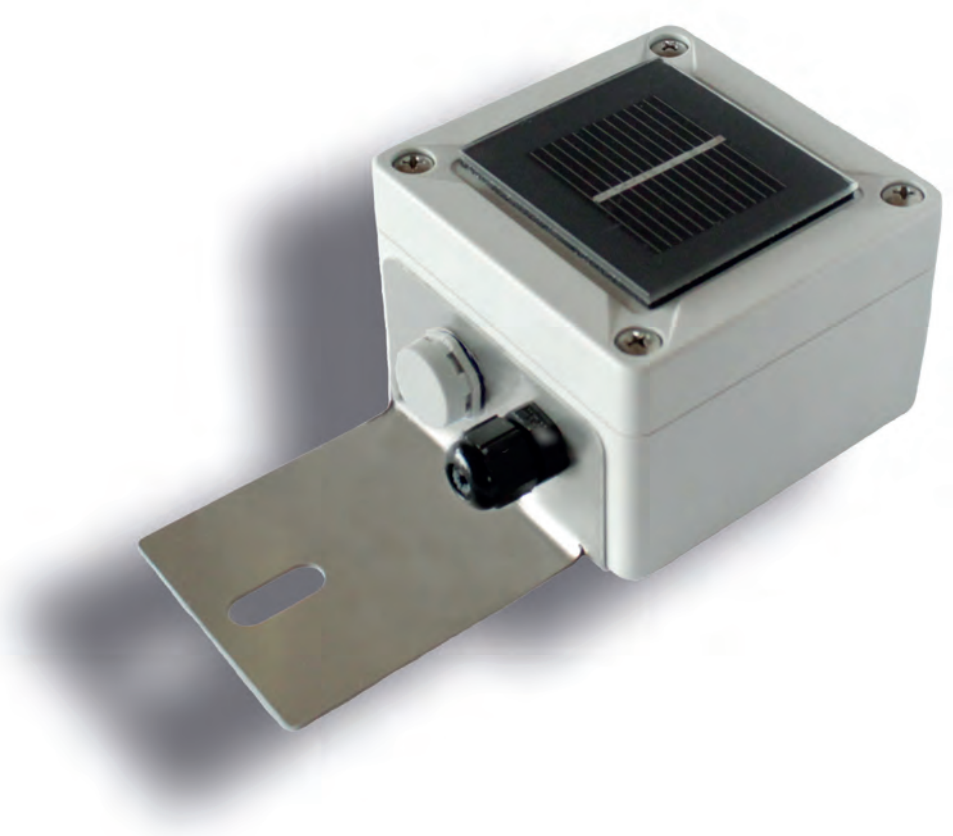
TRITEC

energy for a better world



INSTALLATION INSTRUCTIONS

IRRADIATION SENSOR

SPEKTRON 320

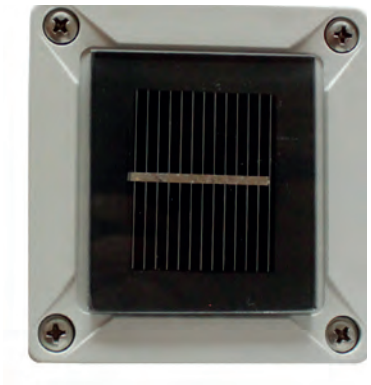
INTRODUCTION

This irradiation sensor provides the following possibilities for the evaluation of irradiation between 0 and 1500 W/m²:

- Voltage output 0 – 150 mV
- Voltage output 0 – 3.125 V
- Voltage output 0 – 10 V
- Current output for two-wire technology 4 – 20 mA

The maximum measurable irradiation amounts to 1500 W/m². Only one measuring output can be used at a time.

TECHNICAL DATA

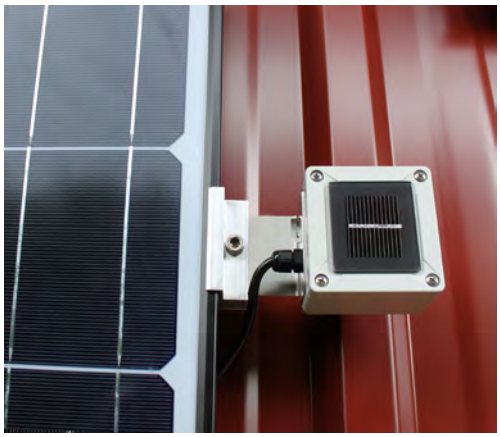


Model	Spektron 320
Sensor type	Monocrystalline cell (33 mm / 40 mm)
Measuring range	0 – 1500 W/m²
Sensor accuracy	± 5 % (annual mean)
Outlet	4 – 20 mA or 0 – 10 V or 0 – 3.125 V or 0 – 150 mV
Calibration	Sun Simulator Solar Constant 1200 with reference sensor calibrated by the ISE
Design of the sensor	Measuring cell enclosed in glass
Supply voltage	5 – 30 V DC (at output signal ranges 0 – 3.125 V, 0 – 150 mV, 4 – 20 mA) or 12 – 30 V DC (at output signal ranges 0 – 10 V, 0 – 3.125 V, 0 – 150 mV, 4 – 20 mA)
Power consumption	Appr. 30 mW
Casing	Polycarbonate, UV-resistant, with PG screw joint and pressure differential valve
Dimensions	150 mm x 80 mm x 60 mm
Connections	Connection terminals, 1.5 mm²
Mounting	Mounting with drill hole to be fixed with a screw
Protection mode	IP65
Weight	300 g

WARNINGS

The installation may only be performed by qualified electricians. TRITEC shall not assume any liability in case of improper installation, connection and utilization of Spektron 320.

INSTALLING THE SENSOR

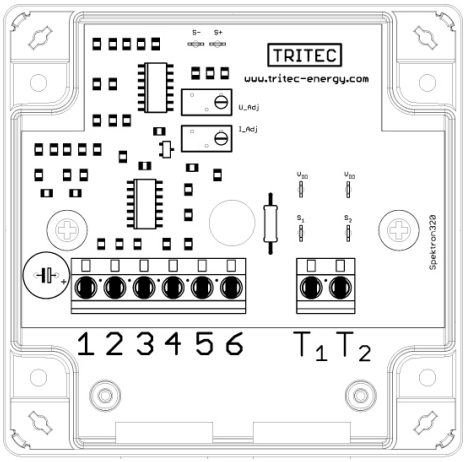


Spektron 210 is fastened with the bracket on the mounting rack of the PV system. Care must be taken that the sensor has the same inclination and orientation as the PV system to be examined. Minor deviations may result in measuring errors!

For optimum moisture protection, the sensor is to be mounted such that the line connection does not point upwards.

When running the connection line, relevant regulations and guidelines are to be complied with.

TERMINAL ASSIGNMENT



No.	Designation	
1	U_{10}	Voltage output 0 – 10 V
2	$U_{3.125}$	Voltage output 0 – 3.125 V
3	U_{PH}	Voltage output 0 – 150 mV
4	V_{DC}	Supply voltage +5 V_{DC} – +30 V_{DC} or +12 V_{DC} – +30 V_{DC}
5	I_{IN}	Current loop 4 – 20 mA
6	GND / I_{OUT}	Mass
T1		not assigned
T2		not assigned

CE DECLARATION OF CONFORMITY

CE

This product is in compliance with relevant guidelines and therefore is to be provided with the CE label. The Declaration of Conformity may be requested from TRITEC.

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