3S-WPVS
WPVS Reference Cell

WPVS Reference Cell

The WPVS Reference Cell is part of SEVEN's meteorological sensor range and is designed to calibrate the irradiance of sun simulators used for PV module testing. With supporting equipment, it can also be used to evaluate the temporal stability and spatial uniformity of the sun simulator's light beam. The reference cells are manufactured in accordance with IEC 60904-2.

The sun simulator measures irradiance in "sun" units, where one unit equals 1000 W/m² at 25°C. The primary purpose of this device is to calibrate photovoltaic cells under standard conditions. The measuring unit includes two connector options that provide analog outputs for solar irradiance and temperature. Standard cells provide the data output via an M8 connector. Upon special request, an EGG.0B.306. CLL LEMO connector can be supplied. A PT1000 temperature sensor is located beneath the solar cell.

Measurements are carried out using spectral irradiance under Standard Reporting Conditions (SRC). After completion of the tests, an ISO/IEC 17025–accredited calibration certificate may be provided as an option.

Benefits and Features

- Class A Compliance
- Similar Structure with PV Panels
- Fast & Simple to Install
- 5 Year Warranty
- SEVEN Customer Support
- High Accuracy

Technical Specifications

	3S-WPVS-IV	3S-WPVS-L
Measured Data	Irradiance and Cell Temperature	
Sensor Type	Monocrystalline Silicon Reference Cell (20 mm x 20mm)	
Data Output	mV (Integrated Precision Shunt Resistor)	
Field of View	162°	
Cell Temperature Sensor Type	PT1000 Class A as per EN 60751 (4-wire)	
Connector Type	M8 Metal Cable Gland	Lemo EGG.0B.306.CLL
Cable Length & Feature	1 m 2x2x0,22 mm LI2Y(St)C11Y-TP, UV and Weather Resistant	
Dimension	70 mm x 79 mm x 16 mm	
Weight	250,8 gr	
IP Rating	IP68	
Sensor Housing Material	Anodized Aluminum	
Standard	IEC 60904-2	
Calibration	Each sensor is calibrated under a Class AAA Sun Simulator according to IEC 60904-2 and IEC 60904-4 standards using a reference cell calibrated by the ISFH Institute in Germany.	
Origin	TÜRKİYE	

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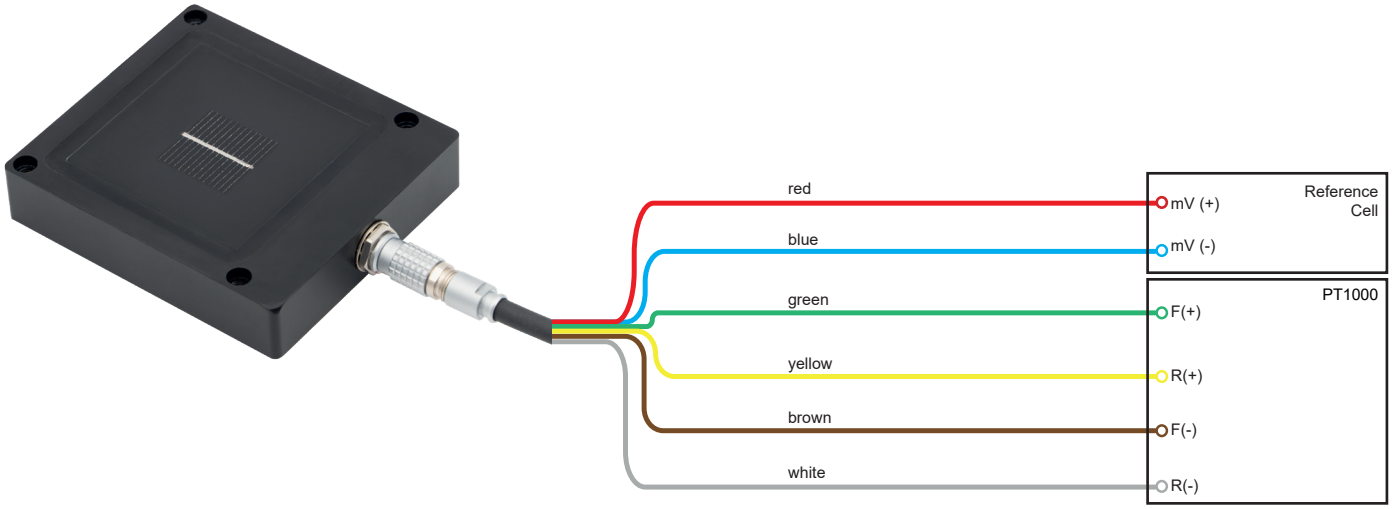
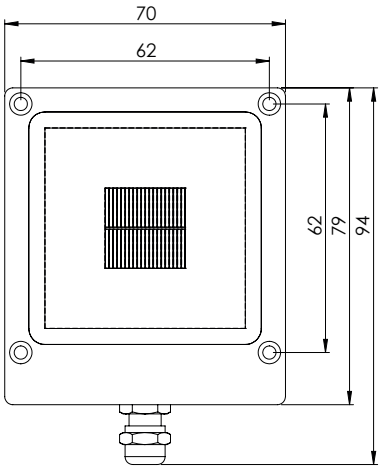
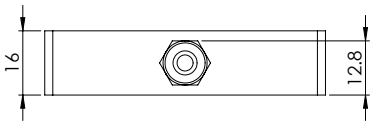
Cable Connections



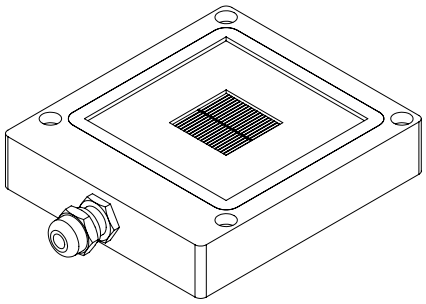
Technical Drawing

3S-WPVS-IV

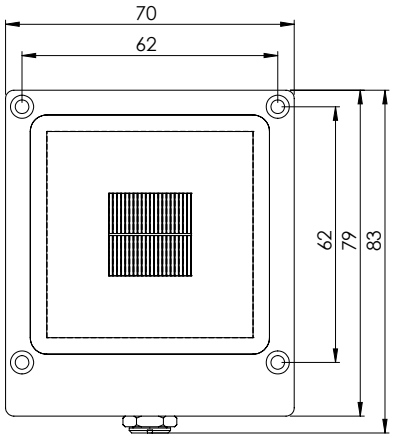


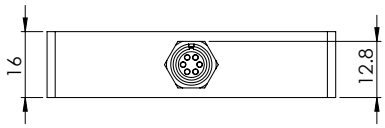


*12.8 mm Cell to Bottom

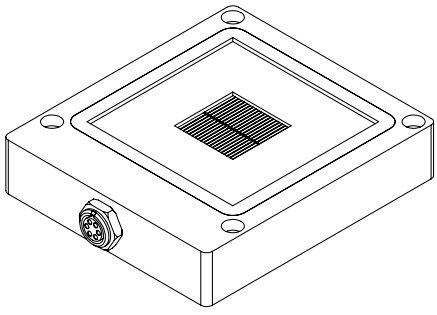


3S-WPVS-L





*12.8 mm Cell to Bottom



Note: All dimensions are in mm.

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