Preliminary

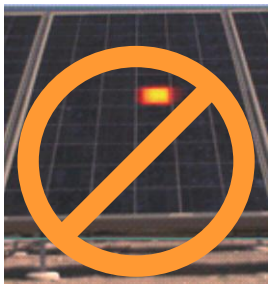
idealPV SSP1 – 220/270 Solar Panel

The Ideal Photo Voltaic panel is low in cost, high power, installs almost anywhere, matches with almost anything, will weather for decades and above all is safe.

After 12 years of research and testing, the Patent Pending idealPV SSP1 module has a build cost less than any other module. Exclusive Forward Only Zero Hot Spot technology embedded in the module keeps the cells low cost, cool and safe, even when partially shaded. FOZHS also drives unmatched compatibility in adapting to shadows, heat, any other module power and any inverter, even motor drives and batteries!

Single string application of 20 idealPVs

Up to 20 modules may be connected in a single string, each automatically adapting to every roof angle and direction available. Beyond making installation a snap, more power is gathered from a smaller roof. The lower 20% of the SSP1 is horizontally strung as a special "mud room". This exclusive feature makes shadows from vent pipes and chimneys less important while increasing power production when the panel is partially covered with dirt or snow.



No Hot Spots

Features you won't find anywhere else

- No Hot Spots
- Extinguishes DC Plasma Arc
- Vmp and Voc fixed over temperature
- Peak power over a dynamic range of voltages
- Install array from the top down with bottom jbox
- Mount multiple headings and angles in the same string
- MPP matches any power idealPV to any other 60 cell module
- Available in Vmp from 25 to 60V, Voc 35 to 70V and Isc 4 to 10A
- Shadow and dirt effect minimized by 80/20 horizontal substrings
- Directly drive standard motor Variable Frequency Drives
- Directly charge 24 to 48 Volt battery systems

Basic features

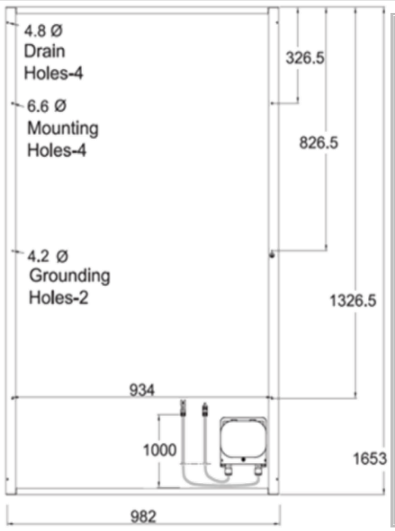
- Exceeds all safety standards
- Long power production life
- Ruggedly built in the USA
- Works with any inverter
- Installs on standard racks

Parameter		Standard	Available as	TC
Voltage	$V_{OC\ (max)}$	40V	35V to 70V	+0 / -2.5%
	$\beta(V_{MP})$	32V	25V to 60V	+0 / -2.5%
Current	Isc 0.1 Sun - 1.5 Sun	10A	4A to 10A	+0 / -2.5%
	$\alpha(I_{MP})$	8.4A	P_{MAX} / V_{MP}	-0.39%/°C
Power	$\gamma(P_{MAX})$	268W	220W to 268W	-0.39%/°C
NOCT	°C	40°C	40°C	T_A + 20°C

Example Order Number: **SSP1-230W-30V_{MP}-40V_{OC}-9I_{SC}**

Specifies a P_{MP} of 230W minimum over an MPR of 26V @ 9A to 30V @ 7.7A

For a 1,000V/600V system, 25/15 modules maximum string (5.75kW/3.45kW)



Maximum inverter yield over a range of currents is driven by idealPV's **M**aximum **P**ower **R**ange (not just one point). At right: One SSP1 in full sun (red) and another in half sun (green). For string currents of 8A to 10A, both are at maximum available power. idealPV's MPR can also share a string with legacy MPP.

Dimensions and Weights	
Cells / Module	60 Cell (equivalent Si)
Module Dimensions	1653mm x 982mm
Module Thickness (Depth)	46mm
Approximate Weight	18.7kg