



TPS-12-35W

DATA SHEET

Heavy Duty Solar Panel

Features

- Excellent Low Light Performance
- Extremely Reliable. 5 Year Product Warranty. 25 year Solar Cell Output Warranty.
- High Efficiency with High Transparency Low Iron Tempered Glass Cover. Rugged Extruded Anodized Aluminum Frame
- Sealed for Protection from Harsh Environments
- 36" Output Cables with MC4 Solar Connectors for Easy Hookup

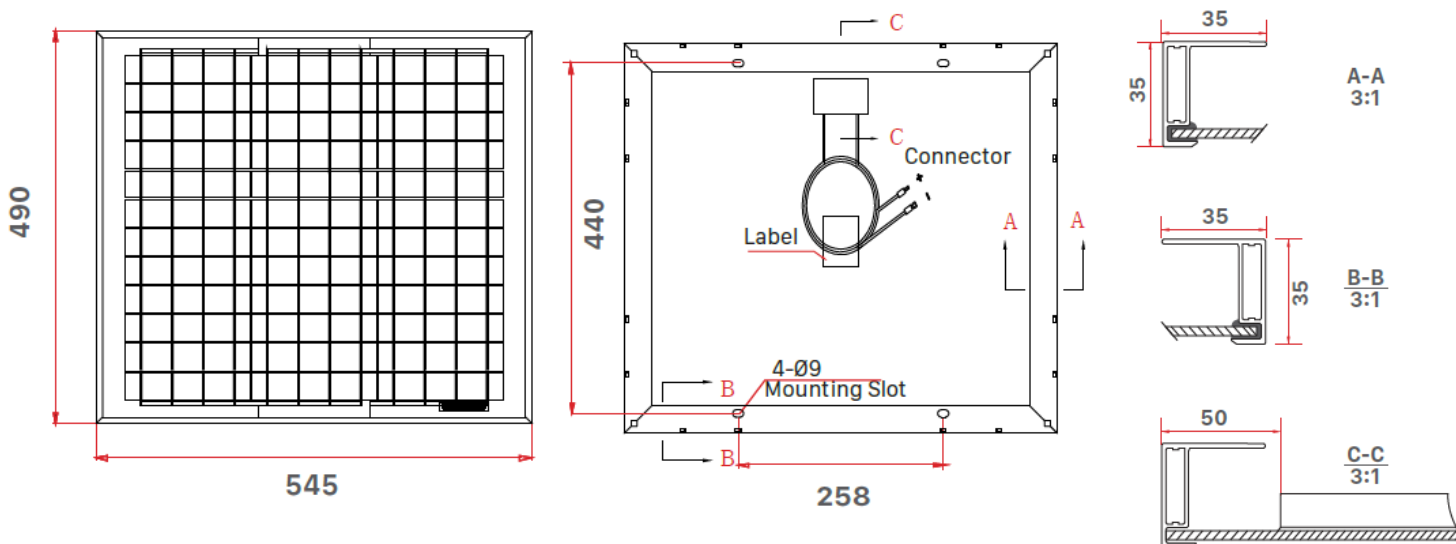


Applications

- Battery Charging Applications
- Wireless Base Stations
- Remote Sensors
- Remote Gates
- Surveillance Cameras
- Outdoor Lighting
- Backup Power Systems
- Electric Fence

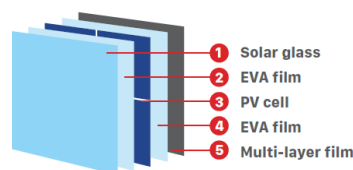
Description

The TPS-12-35W solar panels are high efficiency 36 cell designs with excellent low light performance. The polycrystalline silicon solar cells are laminated with a TPT (Tedlar/Polyester/Tedlar) and EVA (Ethylene Vinyl Acetate) bi-layer for high reliability and long life. The cell array is sealed in a heavy duty extruded 6063-T5 aluminum frame with a high transparency low iron tempered glass cover to protect the solar cells from harsh environments; hail, wind, snow and ice. The solar panels are easy to mount because of the aluminum frame design. The wired connections are via a 12AWG x 900mm (36") outdoor rated cable terminated with MC4 solar connectors.



Specifications

TPS-12-35W																																									
Maximum Power (+/-3%)	35W																																								
Voltage at Pmax (Vmp)	16.92V																																								
Current at Pmax (Imp)	2.07A																																								
Open Circuit Voltage (Voc)	20.87V																																								
Short Circuit Current (Isc)	2.19A																																								
Short Circuit I Temp Coeff	+ 0.045% / °C																																								
Open Circuit V Temp Coeff	-0.292% / °C																																								
Output Power Temp Coeff	-0.408%/°C																																								
Wind Survivability	201kph (125mph)																																								
Hailstone Survivability	1" @ 50mph																																								
Operating Temperature	-40 to +85°C																																								
Continuous Power Capability (6hrs average sunlight per day)	8.75W																																								
Size	490 x 545 x 35mm (19.3 x 21.5 x 1.4")																																								
Weight	4kg (8.8lb)																																								
Warranty	5 Year Product / 25 Year Output																																								
IV Curve	<div>Electrical Performance at 25°C, AM1.5</div> <table border="1"><caption>Approximate data points from the IV Curve graph</caption><thead><tr><th>Voltage (V)</th><th>Current (A) at 1000 W/m²</th><th>Current (A) at 900 W/m²</th><th>Current (A) at 800 W/m²</th></tr></thead><tbody><tr><td>0</td><td>2.1</td><td>1.8</td><td>1.6</td></tr><tr><td>3</td><td>2.1</td><td>1.8</td><td>1.6</td></tr><tr><td>6</td><td>2.1</td><td>1.8</td><td>1.6</td></tr><tr><td>9</td><td>2.1</td><td>1.8</td><td>1.6</td></tr><tr><td>12</td><td>2.1</td><td>1.8</td><td>1.6</td></tr><tr><td>15</td><td>2.0</td><td>1.7</td><td>1.5</td></tr><tr><td>18</td><td>1.0</td><td>0.8</td><td>0.6</td></tr><tr><td>20</td><td>0.2</td><td>0.1</td><td>0.0</td></tr><tr><td>21</td><td>0.0</td><td>0.0</td><td>0.0</td></tr></tbody></table>	Voltage (V)	Current (A) at 1000 W/m²	Current (A) at 900 W/m²	Current (A) at 800 W/m²	0	2.1	1.8	1.6	3	2.1	1.8	1.6	6	2.1	1.8	1.6	9	2.1	1.8	1.6	12	2.1	1.8	1.6	15	2.0	1.7	1.5	18	1.0	0.8	0.6	20	0.2	0.1	0.0	21	0.0	0.0	0.0
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System Ordering:**TPS-12-35W** 12V 35W Heavy Duty Solar Panel**For further information contact:**

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