TPS-12-85W

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**
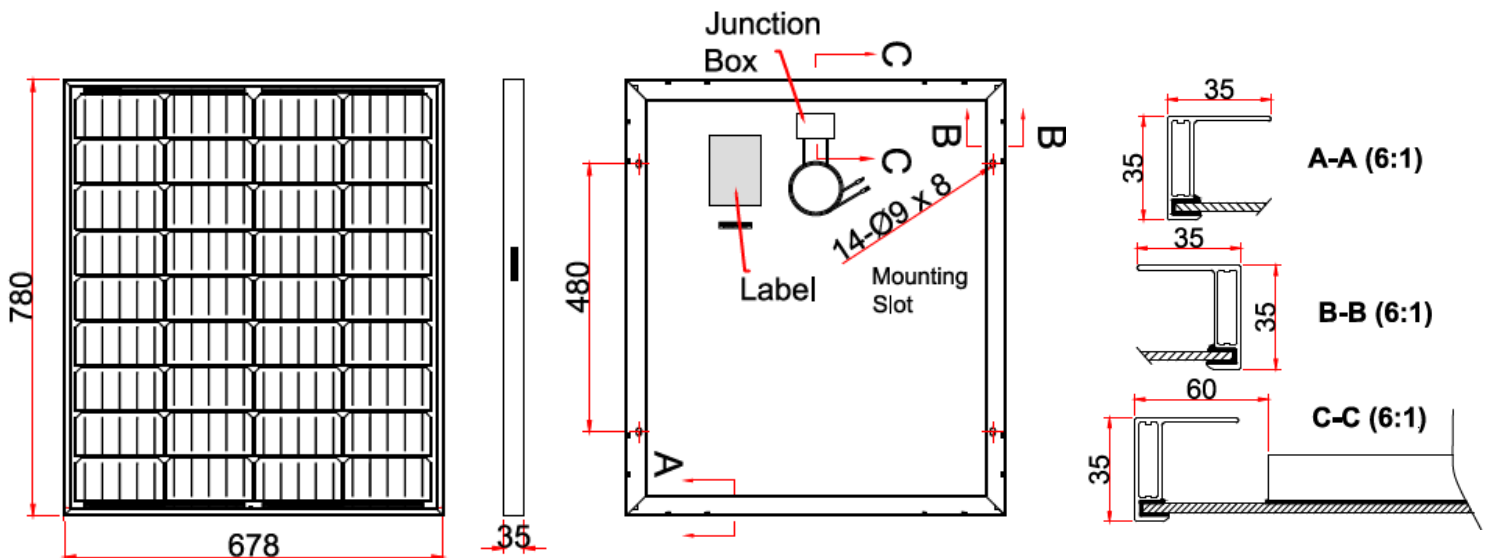- **36" Output Cables with MC4 Solar Connectors for Easy Hookup**

Applications

- **Battery Charging Applications**
- **Wireless Base Stations**
- **Remote Sensors**
- **Remote Gates**

- **Surveillance Cameras**
- **Outdoor Lighting**
- **Backup Power Systems**
- **Electric Fence**

Description

The TPS-12-85W solar panels are high efficiency 36 cell designs with excellent low light performance. The monocrystalline 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.
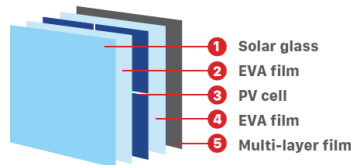
Specifications

TPS-12-85W	
Maximum Power (+/-3%)	85W
Voltage at Pmax (Vmp)	19.65V
Current at Pmax (Imp)	4.33A
Open Circuit Voltage (Voc)	23.7V
Short Circuit Current (Isc)	4.41A
Short Circuit I Temp Coeff	+ 0.039% / °C
Open Circuit V Temp Coeff	-0.307% / °C
Output Power Temp Coeff	-0.423%/°C
Wind Survivability	201kph (125mph)
Hailstone Survivability	1" @ 50mph
Operating Temperature	-40 to +85°C
Continuous Power Capability (6hrs average sunlight per day)	21.25W
Size	780 x 678 x 35mm (30.7 x 26.7 x 1.4")
Weight	6.5kg (14.3lb)
Warranty	5 Year Product / 25 Year Output
IV Curve	

Electrical Performance at 25ºC, AM1.5

System Ordering:

TPS-12-85W   12V 85W Heavy Duty Solar Panel

1 Solar glass
2 EVA film
3 PV cell
4 EVA film
5 Multi-layer film

For further information contact:

Tyconsystems.com

RoHS compliant

TYCON Solar™