

# N-Series 85W PV Module SPM085P-TS-N

#### **Solartech N-Series Modules**

Solartech photovoltaic N-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

• Accessible junction box with 2 MC4 style 3ft leads for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

Proven superior field performance

Tight power tolerance

#### **Qualifications and Certifications**





#### **Applications**

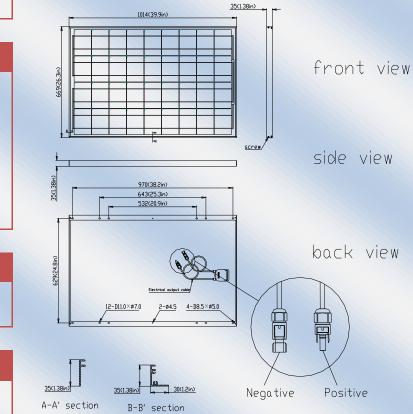
- Traffic & Safety
- Federal Government
- Agricultural
- Security
- Telecommunications
- Water and Wastewater
- Weather & Environmental Monitoring
- RV Camper
- Emergency Power
- Telemetry
- •SCADA, RTU, GPS
- Marine
- Area Lighting & Sign
- •Wi-Fi & Wi=Max
- Fence & Gate

#### Model Number SPM085P-TS-N

## Electrical Characteristics

characteristics		
Max power(Pm)	85W	
Maximum power voltage(Vpm)	17.9V	
Maximum power current (Ipm)	4.84A	
Short circuit current (Isc)	5.17A	
Open circuit voltage (Voc)	21.9V	
Module efficiency	12.53%	
Tolerance	±5%	
Nominal Voltage	12V	
Temperature coefficient of Voc	-0.36%/K	
Temperature coefficient of Pm	-0.46%/K	
Temperature coefficient of Isc	0.05%/K	
NOCT	48℃±2℃	
Maximum series fuse rating	12A	
Maximum system voltage	600V	

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 104mm) in a 4x9 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Dimensions	39.9in(1014mm)x26.3in(669mm)x1.38in(35mm)
Weight	19.8lb (9.0kg)
Operating Temperature	-40°C∼90°C
Storage Humidity	<90%



#### **IV Curves** IV CURVES 6.0 90 75 Current(A) Power(W) 60 3.6 45 2.4 30 1.2 15 0 n 15 10 20 25 Voltage(V)

#### Warranty

25-year limited warranty of 80% power output;12-year limited warranty of 90% power output;5-year limited warranty of materials and worksmanship

## Certifications

UL 1703 certification

\*Subject to simulator measurement uncertainty of +/- 5%.

Solartech Power, Inc. reserves the right to modify these specifications without notice. For more detailed specifications, visit www.solartechpower.com