



TPS-12-50W

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 PV Solar Connectors for Easy Connections



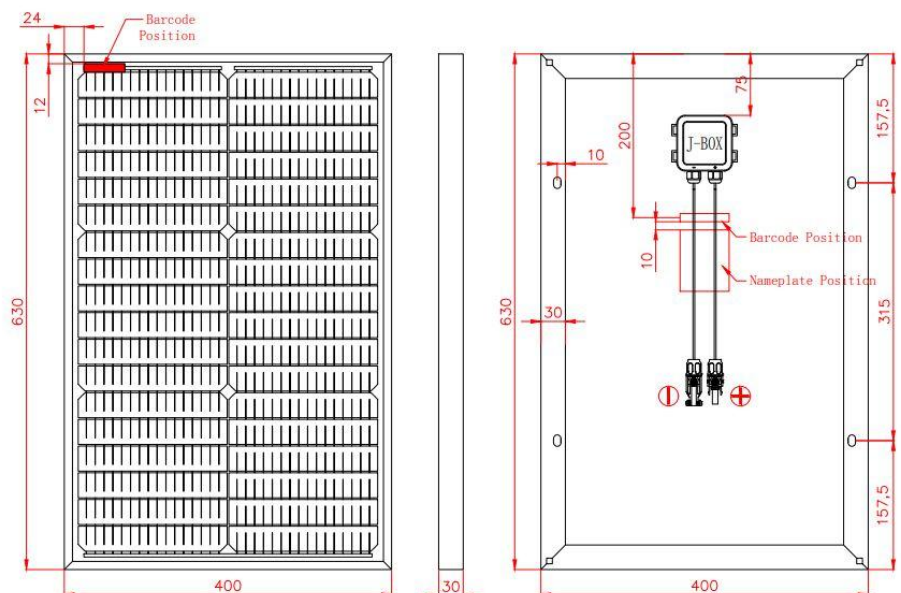
Applications

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

Description

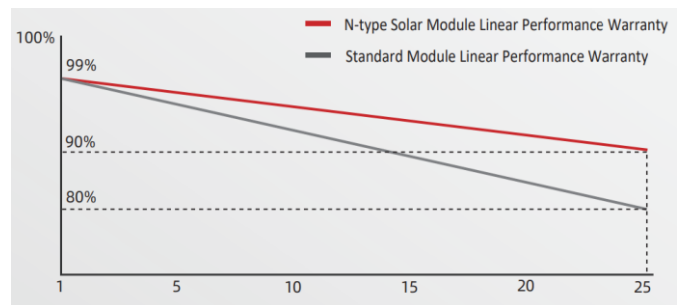
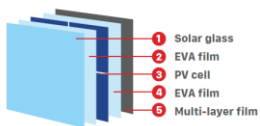
The TPS-12-50W utilizes advanced MBB half-cell technology, delivering more uniform current collection and significantly reducing internal heat loss for improved reliability and efficiency. Its 36 1/3-cell monocrystalline N-type design enables higher output power, with module performance reaching up to 50W, even in compact formats. Enhanced low-light response ensures superior energy production during mornings, evenings, and cloudy conditions.

Built with N-type solar cells, the module naturally exhibits very low LID (Light-Induced Degradation) and excellent resistance to PID (Potential-Induced Degradation), maintaining long-term performance and maximizing power generation. These combined features make the module highly durable, efficient, and optimized for consistent energy yield in a wide range of environmental conditions.



Specifications

| TPS-12-50W | |
|---|--|
| Maximum Power (+/-3%) | 50W |
| Voltage at Pmax (Vmp) | 23.00V |
| Current at Pmax (Imp) | 2.17A |
| Open Circuit Voltage (Voc) | 24.8V |
| Short Circuit Current (Isc) | 2.56A |
| Short Circuit I Temp Coeff | + 0.04% / °C |
| Open Circuit V Temp Coeff | -0.23% / °C |
| Output Power Temp Coeff | -0.28%/°C |
| Wind Survivability | 201kph (125mph) |
| Hailstone Survivability | 1" @ 51mph |
| Operating Temperature | -40 to +85°C |
| Module Efficiency | 19.9% |
| PV Cable Length with PV Connectors | 914mm (36") |
| Size | 630 x 400 x 30mm (24.8 x 15.7 x 1.18") |
| Weight | 4kg (8.8lb) |
| Warranty | 5 Year Product / 25 Year Output |
| IV Curve |  |



System Ordering:

TPS-12-50W 12V 50W Heavy Duty Solar Panel

For further information contact:

Tyconsystems.com



930 W 14600 S Suite 600
Bluffdale, UT 84065
PH: 801-432-0003
FAX: 801-618-4220