80W (24V) Photovoltaic modules 80J-B (24V)

This line of modules is the direct result of over three decades of design, manufacturing and use. Attending to every detail in the design and manufacture of our products, our process controls and testing methods have optimized module life and electrical energy production.

Solar Electric Supply off-grid modules offer the following features and benefits:

► Built to last

From mountaintops to off-shore platforms, on weather stations in the bitter cold of Antarctica and on telephone signal repeaters in the hot Australian outback, the technology has been proven in the harshest environments.

► Accessible junction box for off-grid connections

J-type junction box has accessible terminals for easier module interconnections in off-grid applications, and it allows fitting cable glands for various cross-sections.

► Thick, durable scratch resistant back sheet

The thick back sheet provides extra insulation and increased resistance to protect your module against rough handling. The white polyester material lasts longer and increases energy production.

► High reliability

Cell interconnections and diode placement use well-established industry practice and are field-proven to provide excellent reliability.

► Quality and certifications

ISO 9001

ISO 9001 factory certification ensures that our manufacturing facilities use proven manufacturing and quality control processes.

Intertek

Certified to UL1703 and ULC1703
Certified for use in Class 1, Division 2 Hazardous locations

Photographs are intended to portray typical module appearance, actual module appearance may vary.

80W (24V) PHOTOVOLTAIC MODULES - 80J-B (24V)

Electrical characteristics

	[1] STC 1000W/m²	[2] NOCT 800W/m²
Maximum power (P_{max})	80W	58W
Voltage at P_{max} (V_{mpp})	35.8V	32.2V
Current at P_{max} (I_{mpp})	2.23A	1.8A
Short circuit current (I_{sc})	2.32A	1.87A
Open circuit voltage (V_{oc})	44.4V	40.4V
Module efficiency	12.4%	
Tolerance (P_{max})	+10% / -5%	
Nominal voltage	24V	
Efficiency reduction at 200W/m²	<5% reduction (efficiency 13.2%)	
Limiting reverse current	2.32A	
Temperature coefficient of I_{sc}	0.105%/°C	
Temperature coefficient of V_{oc}	-0.360%/°C	
Temperature coefficient of (P_{max})	-0.45%/°C	
[3] NOCT	47±2°C	
Maximum series fuse rating	20A	
Application class (according to IEC 61730:2007)	Class C	
Maximum system voltage	600V (U.S. NEC)	

1: Values at Standard Test Conditions (STC): 1000W/m² irradiance, AM1.5 solar spectrum and 25ºC module temperature
2: Values at 800W/m² irradiance, Nominal Operation Cell Temperature (NOCT) and AM1.5 solar spectrum
3: Nominal Operation Cell Temperature: Module operation temperature at 800W/m² irradiance, 20ºC air temperature, 1m/s wind speed

Mechanical characteristics

Solar cells	72 crystalline silicon cells in series
Front cover	High transmission 3.2mm (1/8th in) glass
Encapsulant	EVA
Back cover	White polyester
Frame	Silver anodized aluminum
Diodes	Two Schottky bypass diodes included
Junction box	IP65 with 4 terminal screw connection block; accepts PG 13.5, M20 13mm (½") conduit, or cable fittings accepting 6-12mm diameter cable. Terminals accept 2.5-10mm² (8-14 AWG) wire
Dimensions	1209 x 537 x 50mm / 47.6 x 21.1 x 2in
Weight	7.7kg / 17lbs

All dimensional tolerances within ±1% unless otherwise stated.

Warranty*

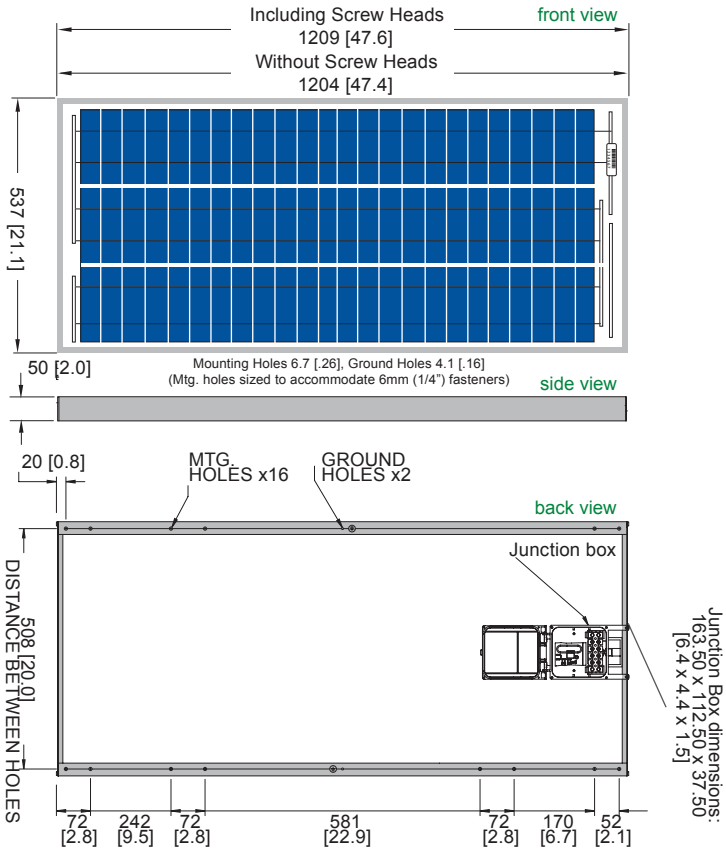
- ► Free from defects in materials and workmanship for 2 years
- ► 90% min. power output over 12 years
- ► Optional 25 years available

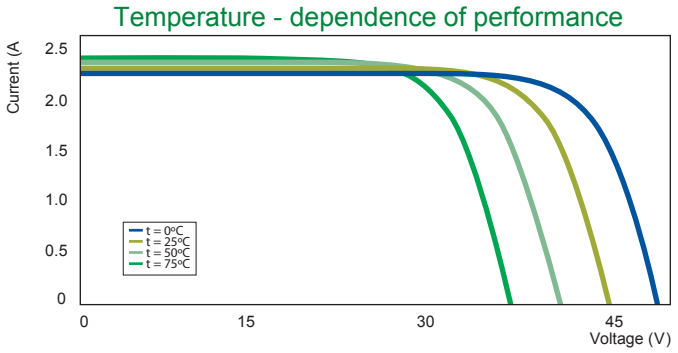
* Refer to limited warranty certificate for terms and conditions.

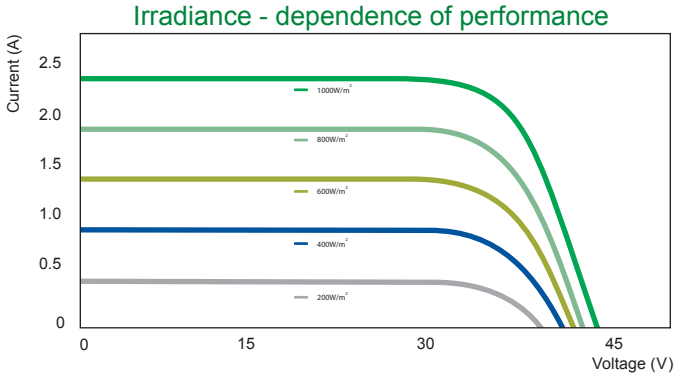
Certification

Listed to UL 1703 & ULC ORD-C1703 Standard for Safety by Intertek ETL. Class C Fire Rating.

Approved by Intertek ETL according to FM 3611, Dec 2004, and according to CAN/CSA C22.2 No. 213-M1987, 1st Edition, Reaffirmed 2004, for use in a Class I, Division 2, Group A, B, C, D Hazardous (Classified) Location.







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