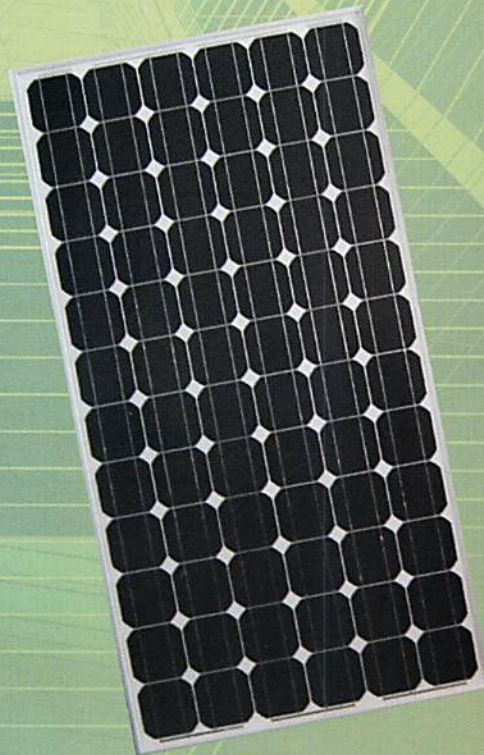


Renewable Energy



Len

Len 180 Wp - 24 V Monocrystalline PHOTOVOLTAIC MODULES



*Certified by B2TE BPPT Based on
SNI:04-3850.2-1995
Corrosion Test Report Based on
SNI:04-6298-2000*

Len 180 Wp - 24V Monocrystalline dimanfaatkan dalam berbagai aplikasi sistem pembangkit tenaga surya baik yang berdiri sendiri (*Stand Alone System*) ataupun Sistem Komunal. Modul ini dirancang untuk memberikan daya dengan tegangan cukup untuk mengisi baterai. Tepat digunakan dalam berbagai aplikasi seperti peralatan instrumen, sensor keamanan, navigasi lampu lalu lintas dll.

Len 180 Wp - 24V Monocrystalline used in many variety solar power plant application either stand alone system or communal system. This modul designed to provide power with enough voltage to charge battery. Appropriately used in many application such as instrument equipment, security sensors, navigation and traffic light, etc.

Electrical Characteristics

STC Len 180 Wp - 24V Monocrystalline

Optimum Operating Voltage (Vmp)	35.6 V
Optimum Operating Current (Imp)	5.06 A
Open - Circuit Voltage (Voc)	44.1 V
Short - Circuit Current (Isc)	5.52 A
Maximum Power at STC (Pmax)	180 W
Modul Efficiency	14.5 %
Operating Module Temperature	-40 °C to +85°C
Maximum System Voltage	1000 V DC
Maximum Series Fuse Rating	20 A
Power Tolerance	+ 0 - 3 %

STC : Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
Power measurement tolerance : ±3 %

NOCT Len 180 Wp - 24V Monocrystalline

Maximum Power (W)	160 W
Maximum Power Voltage (V)	32.7 V
Maximum Power Current (A)	4.89 A
Open Circuit Voltage (Voc)	41.31 V
Short Circuit Current (Isc)	5.61 A

NOCT : Irradiance 800 W/m², module temperature 20 °C,
wind speed 1 m/s; Power measurement tolerance : ±3 %

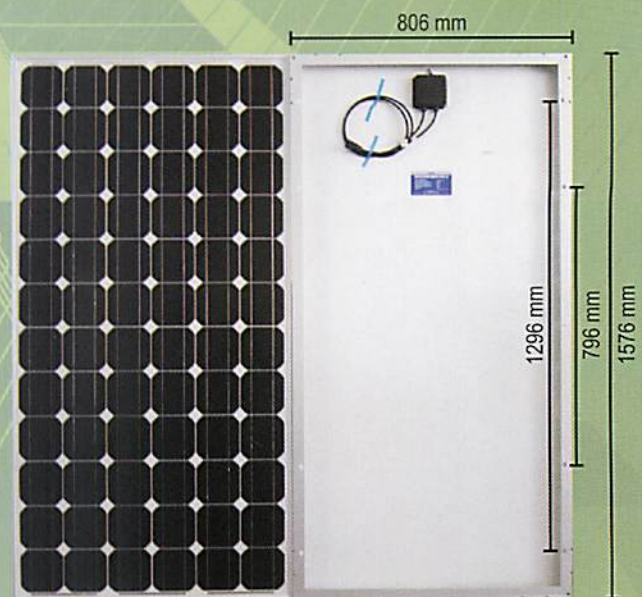
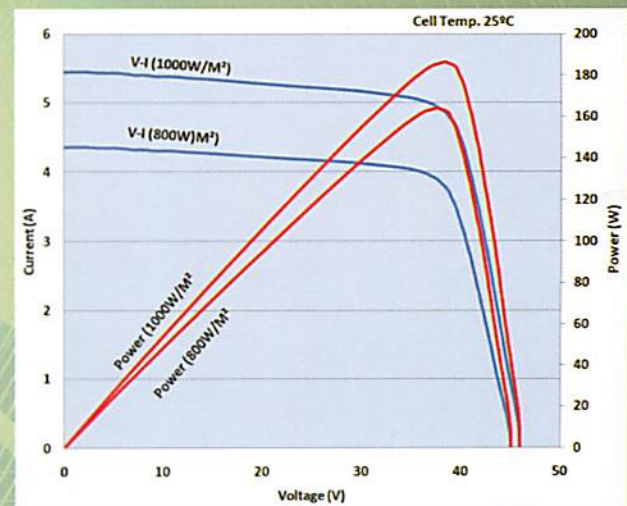
Mechanical Characteristics

Solar Cell	Monocrystalline 125 x 125 mm (5 inches)
No. of Cells	72 (6 X 12)
Dimensions	1576 X 806 X 50 mm
Weight	16.5 Kg
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65
Output Cables	TUV (2Pfg1169:2007), UL 4703, UL 44 4 mm ² (0.00375 inches ²)
Connectors	RADOX [®] SOLAR integrated twist locking connectors

Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45 ± 3 °C
Temperature Coefficient of Power	-0.41 %/°C
Temperature Coefficient of Voc	-0.31 %/°C
Temperature Coefficient of Isc	0.047 %/°C

Current-Voltage & Power-Voltage Curve (Len 180 Wp - 24V Monocrystalline)



4.1.180-M.I-14



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ISO 9001 : 2008 OHSAS 18001 : 2007
ISO 14001 : 2005 SMK3