

USL



Solar

Photovoltaic

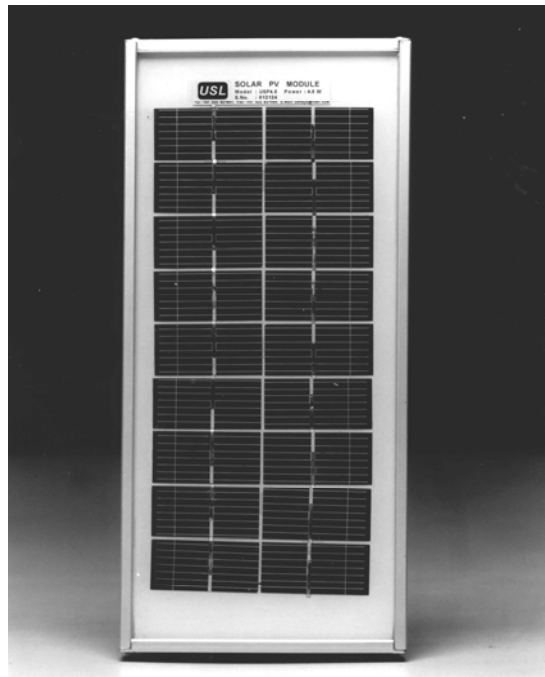
Modules

USP5 (6V) / USP5 (12V)

USL provides cost-effective photovoltaic power for general use, operating DC directly or, in an inverter-equipped system, AC loads. The 18 / 36 cells in series provides 5 watts (6V & 12V) of maximum power, it is used primarily in utility grid-supplemental systems, telecommunications, remote villages and clinics, pumping and load-based aids to navigation.

M5

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*M5 Series:
Monocrystalline modules*

Proven Materials and Construction

USL experience shows in every aspect of this module's construction and materials

- Anodized aluminum frame offers required strength and allows for quick and easy installation on standard array structures.
- 18 Crystalline silicon solar cells in series in 6V.
- 36 Crystalline silicon solar cells in series in 12V.

- Modules are laminated in toughened low iron content PV grade glass – Ethyl Vinyl Acetate films – PV module back sheet.

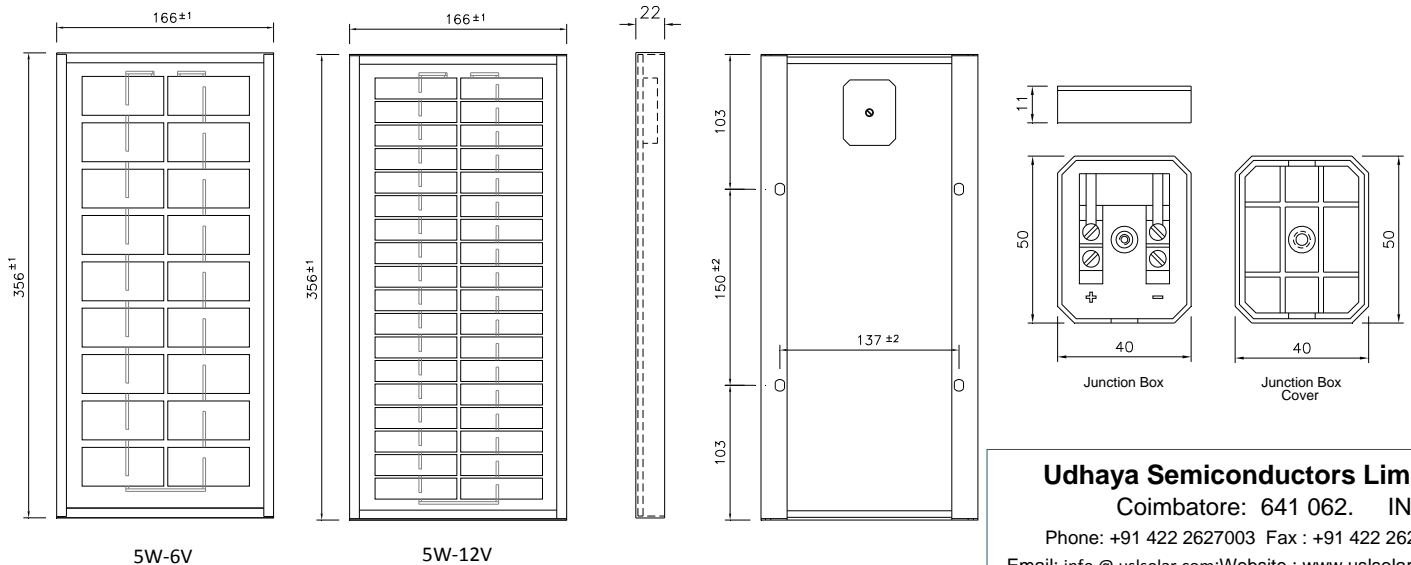
- Optimized lamination process parameters ensure a stable laminate. Junction Box

- Each module is flash tested in a Sun simulator to ensure conformity to specification.

Electrical and Mechanical Data

Model	USP5 (6V)	USP5 (12V)
Maximum power (Pmax)	5 Wp	5 Wp
Open Circuit Voltage (Voc)	10.75 V	21.5 V
Maximum power point voltage (Vmpp)	8.55 V	17.1 V
Short circuit current (Isc)	0.66 A	0.33 A
Maximum power point current (Impp)	0.58 A	0.29 A
Tolerance	±10%	±10%
Cell Size (mm)	32 x 62.5	16 x 62.5
No. of cells	18	36
Dimensions (mm) ± 1	356 x 166 x 22	356 x 166 x 22
Maximum system voltage	600	600
Temperature co-efficient	NOCT (°C)45	NOCT (°C)45
$\frac{dVoc}{dT}$ (Voc) (mV/°C)	- 105	- 105
$\frac{dIsc}{dT}$ (Isc) (mA/°C)	- 0.32	- 0.32
$\frac{dPmax}{dT}$ (Pmax) (%/°C)	- 0.45	- 0.45
Weight (kgs)	0.7	0.7

Standard Test Condition : Irradiance 1,000 W/sq.m, Temperature 25deg C Air mass 1.5 spectrum)



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