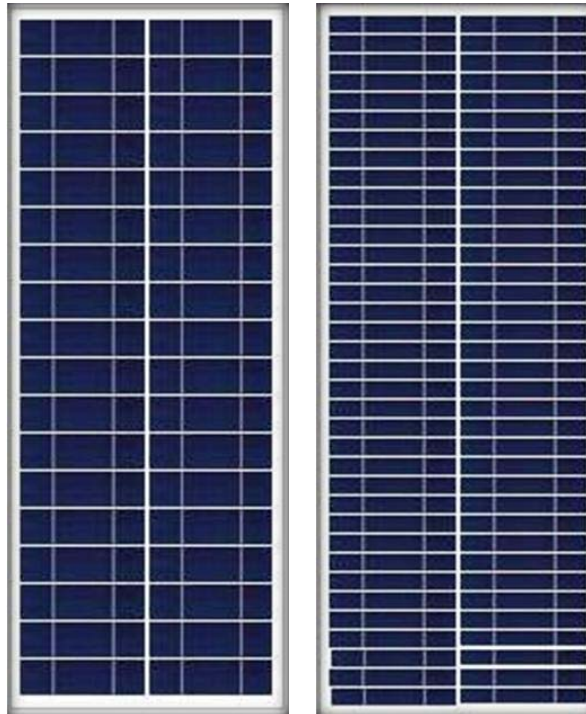


### Polycrystalline Modules

USL provides cost-effective photovoltaic power for general use, operating DC directly or, in an inverter-equipped system, AC loads. The 36 cells in series provides 37W & 40Watts of maximum power, it is used primarily in utility grid-supplemental systems, telecommunications, remote villages and clinics, pumping and load-based aids to navigation.



#### 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.
- 36/72 Crystalline silicon solar cells in series.
- 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 with IP65 class protection are standard in all modules.
- Each module is flash tested in a Sun simulator to ensure conformity to specification.



### Electrical and Mechanical Data

Model	KL037	KL040
Maximum power (Pmax)	37 Wp	40 Wp
Open Circuit Voltage (Voc)	21.5 V	21.5 V
Maximum power point voltage (Vmpp)	17.1 V	18.0 V
Short circuit current (Isc)	2.42 A	2.44 A
Maximum power point current (Imp)	2.17 A	2.22 A
Tolerance of Pmax	±10%	±10%
Cell Size (mm)	44 x156 / 21x156	44 x156 / 21x156
No. of cells	36 / 72	36 / 72
Dimensions (mm) ± 1 - 2 X 18 Matrix	890 x 345 x 38	890 x 345 x 38
Dimensions (mm) ± 1 - 4 X 9 Matrix	665 x 530 x 38	665 x 530 x 38
Maximum system voltage	1000	1000
Module Efficiency - 2 X 18 Matrix	12.05%	13.03%
Weight (kgs)	3.7	3.7

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

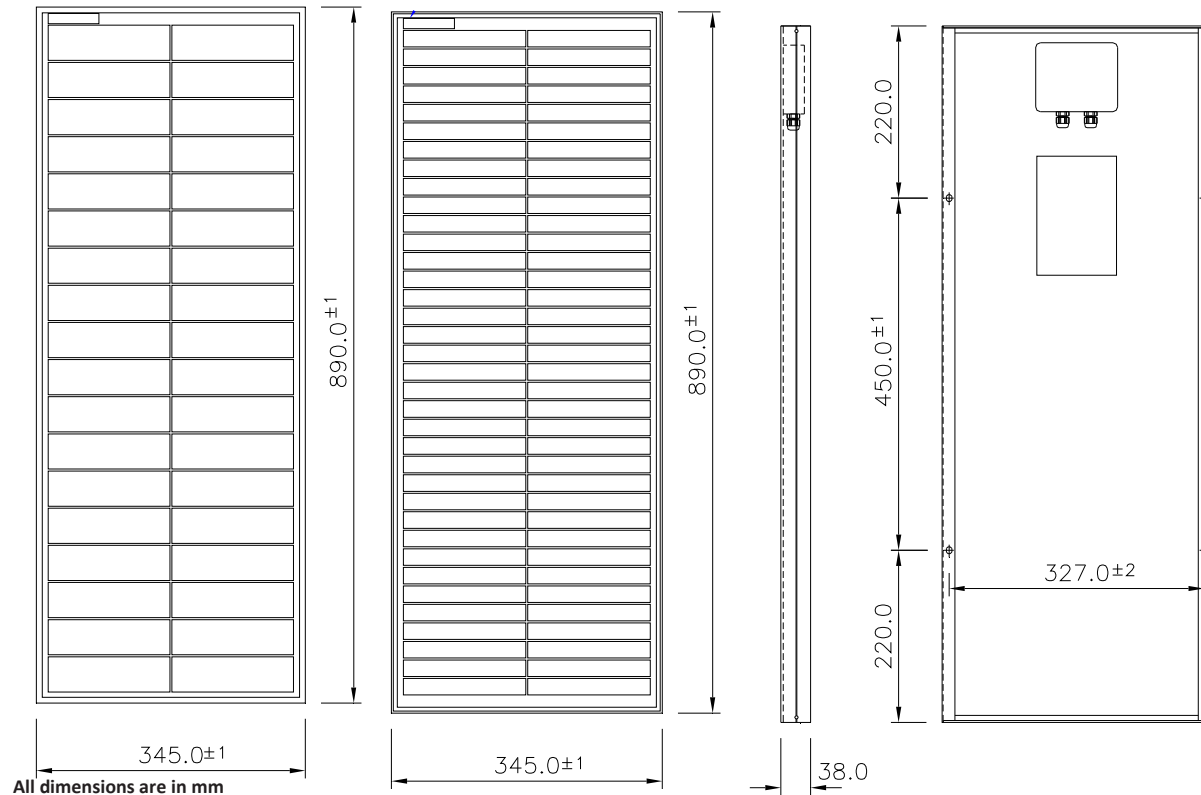
### Qualification and certificates

The Photovoltaic Modules certified to IEC61215 & EN IEC 61730 Class A, Safety Class II



### Performance of Thermal Characteristics

Temperature co-efficient	NOCT (°C)45
Power [Pmax]	-0.43 %/K
Open-circuit voltage [ Voc ]	-0.36 %/K
Short circuit current (Isc)	+0.06 %/K



Our Company Certified by TUV according to ISO 9001:2008

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