

Polycrystalline Modules

USL Solar provides cost-effective photovoltaic power for general use, operating DC directly or, in an inverter-equipped system, AC loads. The 70 cells in PV Module provides 200Watts or 210Watts of maximum power w.r.t KL200 or KL210, when it is used primarily in utility grid-supplemental systems, telecommunications, remote villages and clinics, pumping and load-based aids to navigation.



**Pictures provided only for illustrative purpose, actual product may differ.*

Proven Materials and Construction

USL Solar 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.
- 70 Crystalline silicon solar cells in series for 24V type with by pass diodes installed.
- 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 PG Cable glands and bypass diodes are standard in all modules.
- Each module is flash tested in a Sun simulator to ensure conformity to specification.

Electrical and Mechanical Data

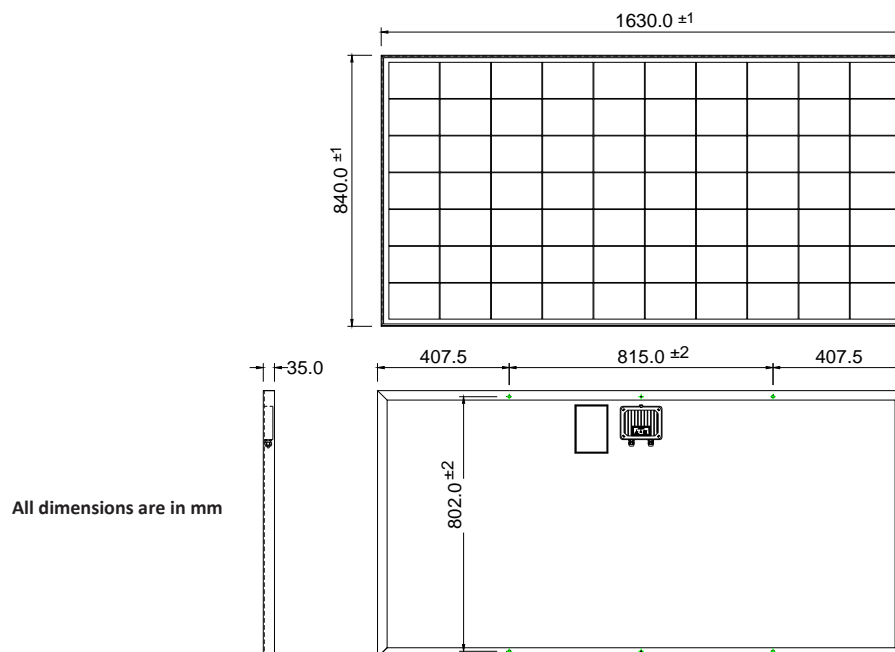
Model	KL200	KL200	KL210	KL210
Maximum power (Pmax)	200 Wp	200 Wp	210 Wp	210 Wp
Type	12 V	24 V	12 V	24 V
Open Circuit Voltage (Voc)	21.5 V	43.0 V	22.5 V	45.0 V
Maximum power point voltage (Vmpp)	17.5 V	35.0 V	18.0 V	36.0 V
Short circuit current (Isc)	12.57 A	6.285 A	12.80 A	6.42 A
Maximum power point current (Impp)	11.43 A	5.715 A	11.66 A	5.83 A
Tolerance of Pmax	±7.5%	±7.5%	±7.5%	±7.5%
Cell Size (mm)	112 x 156	112 x 156	112 x 156	112 x 156
No. of cells	70	70	70	70
Dimensions (mm) ± 1	1630 x 840 x 35	1630 x 840 x 35	1630 x 840 x 35	1630 x 840 x 35
Maximum system voltage	750	750	750	750
Module Efficiency	14.61%	14.61%	15.34%	15.34%
Weight (kgs)	15.5	15.5	15.5	15.5

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

*Pictures provided only for illustrative purpose, actual product may differ.

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



Qualification and certificates

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



UDHAYA SEMICONDUCTORS LIMITED.,

1/482, Avinashi Road, Neelambur, Coimbatore – 641 062. INDIA.

Phone : +91 422 3035000 / 3035007, email : info@uslsolar.com / www.uslsolar.com