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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Udhaya Semiconductors Limited**

**KL018\_KL020**

**KL020**

Also available on the web at  
[EnergyPal.com/udhaya-semiconductors-limited-solar-panels/kl020](http://EnergyPal.com/udhaya-semiconductors-limited-solar-panels/kl020)

# USL

Solar

Photovoltaic

Modules



## KL018 / KL020

*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 18W & 20 Watts of maximum power, it is used primarily in utility grid-supplemental systems, telecommunications, remote villages and clinics, pumping and load-based aids to navigation.*

## Series

# 6



Series:6  
Polycrystalline Modules

## Electrical and Mechanical

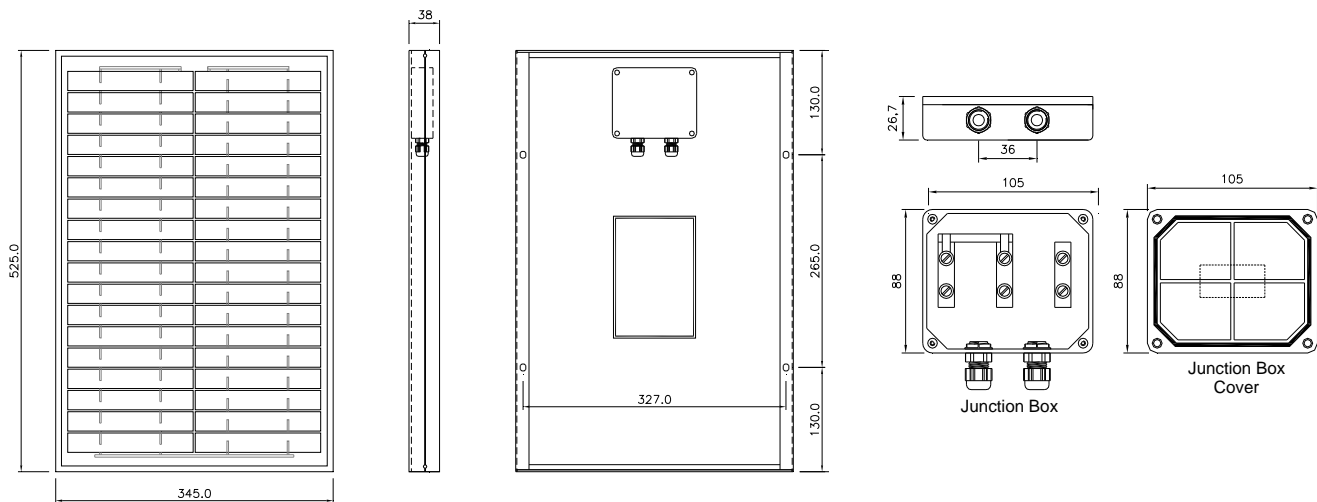
Model	KL018	KL020
Maximum power (Pmax)	18 Wp	20 Wp
Open Circuit Voltage (Voc)	21.5 V	21.5 V
Maximum power point voltage (Vmpp)	17.1 V	17.1 V
Short circuit current (Isc)	1.16 A	1.30 A
Maximum power point current (Impp)	1.05 A	1.17 A
Tolerance	±10%	±10%
Cell Size (mm)	24 X 156	24 X 156
No. of cells	36	36
Dimensions (mm) ± 1	525 x 345 x 38	525 x 345 x 38
Maximum system voltage	600	600
Temperature co-efficient	NOCT (°C)45	NOCT (°C)45
$\frac{dVoc}{dT}$ (mV/°C)	- 105	- 105
$\frac{dIsc}{dT}$ (mA/°C)	- 0.32	- 0.32
$\frac{dP}{dT}$ (Pmax) (%/°C)	- 0.45	- 0.45
Weight (kgs)	2	2

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

### 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.
- 36 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 rating are standard in all modules.
- Each module is flash tested in a Sun simulator to ensure conformity to specification.



KL018 / KL020 Module

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Technical Specifications Subject to change without prior notice due to technology upgradation.