HARNESS THE SUN. ENJOY CLEAN ENERGY.

DATASHEET
ISL SAPPHIRE SERIES I6M0ZZ

MONO CRYSTALLINE CELLS

High efficiency
PID-free photovoltaic cell

With our robust R & D arrangement for processes, raw material improvement and world-class testing facilities, we provide best cell quality & Industry leading efficiencies. Our cells have achieved a low breakage, high shunt, and low series resistance that result in low power loss in the module & better low light performance.

INDIA
3C/1, EcoTech-II, Udyog Vihar,
Greater Noida-201 306,
Dist: Gautam Budh Nagar, (U.P.) INDIA

www.indosolar.co.in

KEY FEATURES

Fully automated process
Manufactured in world class fully automated European equipment.

Lower reverse current
Monitored strictly for reverse-current, a key metric to decide excellence of the cells. Our cells feature a very low reverse current of less than 1 A at -12 V.

Production and quality control:
Fully compliant as per IEC 60904and IEC 60891 Full reverse-current resistance testing. Regular calibration to Fraunhofer ISE standards

Positive cell sorting
Cell sorting at 0.1% absolute efficiency ensuring positive power output at module level

High annual yields
Our cells guarantee better performance in weak light than our competitors. High annual yields can thus be achieved, even at sub-optimal levels of sunlight.

Quality assurance
Cell performance is also measured in compliance with UL, CEC, CE and IEC standards 60904 and 60981 and with regard to solar spectral irradiance distribution in compliance with IEC 60904-3 ed. 2 2008.

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ELECTRICAL CHARACTERISTICS

Part No.	Efficiency %	Pm (Wp)	Vmp (V)*	Imp (A)*	Voc (V)*	Isc (A)*	Current (A) at 0.5 V
I6MO2000ZZ	20.0	4.867	0.568	8.569	0.643	9.117	8.811
I6MO1990ZZ	19.9	4.843	0.566	8.556	0.643	9.104	8.798
I6MO1980ZZ	19.8	4.819	0.564	8.543	0.642	9.091	8.785
I6MO1970ZZ	19.7	4.794	0.562	8.531	0.641	9.079	8.773
I6MO1960ZZ	19.6	4.770	0.560	8.518	0.640	9.066	8.760
I6MO1950ZZ	19.5	4.746	0.558	8.505	0.640	9.053	8.747
I6MO1940ZZ	19.4	4.721	0.556	8.491	0.639	9.039	8.733
I6MO1930ZZ	19.3	4.697	0.554	8.478	0.638	9.026	8.720
I6MO1920ZZ	19.2	4.673	0.552	8.465	0.637	9.013	8.707
I6MO1910ZZ	19.1	4.648	0.550	8.451	0.637	8.999	8.693
I6MO1900ZZ	19.0	4.624	0.548	8.438	0.636	8.986	8.680
I6MO1890ZZ	18.9	4.600	0.546	8.424	0.635	8.972	8.666
I6MO1880ZZ	18.8	4.575	0.544	8.410	0.634	8.958	8.652
I6MO1870ZZ	18.7	4.551	0.542	8.396	0.634	8.944	8.638
I6MO1860ZZ	18.6	4.526	0.540	8.382	0.633	8.930	8.624
I6MO1850ZZ	18.50	4.502	0.538	8.368	0.632	8.916	8.610

Note: All data are at Standard Testing Condition i.e. Irradiance 1000 W/m2 with AM1.5 spectrum, Cell temperature 25°c.Test method according to IEC-60904-1 Efficiency range: 0 to + 0.1% absolute, PMPP(Pm) tolerance:± 0.5% rel. with Indosolar sister cell traceable to ISE Fraunhofer

*Specifications subject to change without prior notice as processes keep on improving. Indosolar reserves the rights of final interpretation and revision of this data sheet i

MECHANICAL DATA AND DESIGN

Product Format	:156 mm X 156 mm ± 0.5mm
Thickness(Si)	:240µm ± 20µm
Substrate Material	:P-Type mono crystalline silicon wafer
Front Contact(-)	:3 nos., 1.4 mm wide & 7 mm long Padded silver bus bar
Back Contact(+)	:3 nos.,2.5mm wide Padded silver bus bar

TEMPERATURE COEFFICIENT

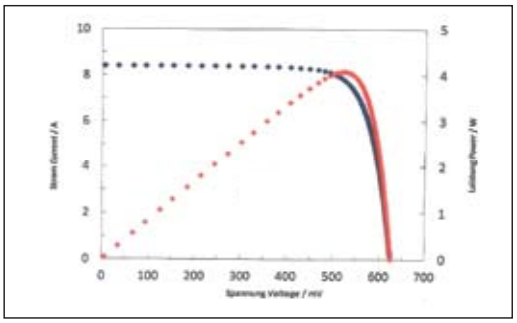
Tk Voltage	: -0.3434 ±0.0059%/°K
Tk Current	: 0.0534 ±0.0065%/°K
Tk Power	: -0.433 ±0.015%/°K

INTENSITY DEPENDENCE

Intensity w/m2	*Imp	*Vmp
1000	1.00	1.000
800	0.80	0.988
600	0.60	0.977
400	0.40	0.955
200	0.20	0.932

Ratio of Voc (Isc) at reduced intensity to Voc (Isc) at 1000w/m2

IV CHARACTERISTICS



SPECTRAL RESPONSE