Super High Efficiency Solar Panel

Starting

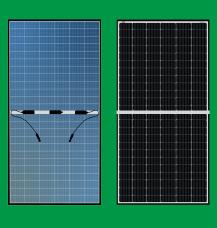
10W - 450W



FOR **HOME**

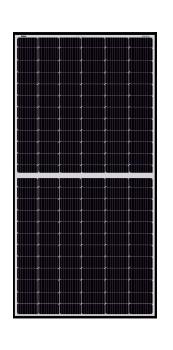


FOR INDUSTRIES



BI-SHARK 440Bi-facial Solar Module

144 Cells / Mono PERC / 1500V DC / 20.2% Maximum Efficiency



KEY FEATURES



Higher module conversion efficiency

Maximize limited space with high eciency mono PERC cells Half-cell design, lower Rs loss, lower hot spot temperature



Highly reliable due to stringent quality control 100% EL double inspection In-house testing goes well beyond certication requirements



Excellent low light performance Excellent low light performance on cloudy days mornings and evenings



Certified to withstand the most challenging environment 2400 Pa wind load • 5400 Pa snow load • 25 mm hail stones at 82 km/h



High system voltage compatible

Maximum 1500V DC system voltage saves total system cost



IP 68 junction box High waterproof level for long term weather endurance

QUALIFICATIONS & CERTIFICATES

- BIS Certified R- 84002526
- ISO 9001: Quality Management System









LOOM SOLAR

Loom Solar is a start-up, a manufacturer of Mono solar panels and AC Module based out of Faridabad, Haryana. It sells solar system across India with promised delivery within 3 days. It is an ISO 9001-2015 certified company and recognized startup by Goyt, of India.

WARRANTY



Product Warranty



Performance Warranty

| Bi-Facial Output | | Bi-33-440 |
|------------------|---------------------|-----------|
| 7% | Water Area (W) | 470 |
| 10% | Grass Area (W) | 485 |
| 13% | Concrete ground (W) | 495 |
| 15% | Sand Soil (W) | 505 |
| 20% | White Coating (W) | 530 |



ELECTRICAL DATA *STC

| Model | Shark Bi-Facial |
|--|-----------------|
| TYPE (Tolerance: 0 - +5W) | 440 |
| Maximum Power Pmax (W) | 440 |
| Maximum Power Voltage Vmp (V) | 41.41 |
| Maximum Power Current Imp (A) | 10.63 |
| Open Circuit Voltage Voc (V) | 11.34 |
| Short Circuit Current Isc (A) | 49.69 |
| Module Efficiency (%) | 19.72 |
| STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM 1.5 | |

ELECTRICAL DATA *NOCT

| Maximum Power Pmax (W) | 329.8 |
|-------------------------------|-------|
| Maximum Power Voltage Vmp (V) | 38.10 |
| Maximum Power Current Imp (A) | 8.65 |
| Open Circuit Voltage Voc (V) | 46.30 |
| Short Circuit Current Isc (A) | 9.17 |

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

TEMPERATURE RATINGS

| Temperature Coefficient of Isc | (alsc) | +0.07%/°C |
|---------------------------------|---------------|-----------|
| Temperature Coefficient of Voc | (βVoc) | -0.36%/°C |
| Temperature Coefficient of Pmax | (γPmp) | -0.38%/°C |
| Normal Module Operating Temper | rature (NMOT) | 43°C±2°C |

OPERATING PARAMETERS

| Maximum System Voltage | 1500 VDC |
|------------------------------|---------------|
| Operating Temperature | -40°C to 85°C |
| Maximum Series Fuse | 25A |
| Maximum Test Load, Push/Pull | 5400Pa/2400Pa |
| Conductivity at Ground | ≤0.1Ω |
| Safety Class | II |
| Resistance | ≥100MΩ |
| Voc and Isc Tolerance | ±3% |

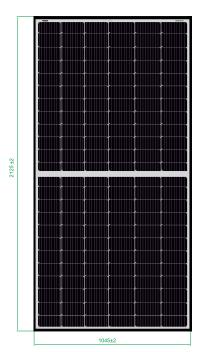
MECHANICAL DATA

| Solar Cell Type | Mono PERC Bifacial, 83 X 16 mm |
|-------------------|--|
| Number of Cells | 144 [12x6 12x6] |
| Module Dimensions | 2131 mm (L) x 1047 mm (W) x 35 mm (T) |
| Weight | 25 kg |
| Front Cover | 3.2 mm Low Iron and Tempered glass with ARC coating |
| Back Sheet | Transparent Backsheet |
| Frame | Anodized Aluminium Alloy |
| J-Box | IP68 / Weatherproof PPO |
| Cable | 4 mm² & 500mm |
| Number of diodes | 3 |
| Connector | MC4 IP68 compatible |

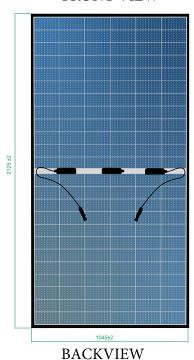
PACKAGING CONFIGURATION

| Module per pallet | 25 pieces |
|----------------------------|-----------|
| Module per 40'HQ container | |

DIMENSION



FRONT VIEW



*Installation instruction must be followed. See the installation manual or contact our technical service department for further information on approved installation.

*The specication and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Loom Solar (India) Pvt. Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

