

# **SIL-300 ML**











## 60 Cell Monocrystalline

PV Module



C H L B B \* \* Chubb provides error and omission insurance to Silfab Solar Inc

### INDUSTRY LEADING WARRANTY

All our products include an industry leading 25-year product workmanship and 30-year performance warranty.

#### **35+ YEARS OF SOLAR INNOVATION**

Leveraging over 35+ years of worldwide experience in the solar industry, Silfab is dedicated to superior manufacturing processes and innovations such as Bifacial and Back Contact technologies, to ensure our partners have the latest in solar innovation.

#### NORTH AMERICAN QUALITY

Silfab is the leading automated solar module manufacturer in North America. Utilizing premium quality materials and strict quality control management to deliver the highest efficiency, premium quality PV modules 100% made in North America.



#### 🛗 BAA / ARRA COMPLIANT

Silfab panels are designed and manufactured to meet Buy American Act Compliance. The US State Department, US Military and FAA have all utilized Silfab panels in their solar installations.

#### **LIGHT AND DURABLE**

Engineered to accommodate low load bearing structures up to 5400Pa. The light-weight frame is exclusively designed for wide-ranging racking compatibility and durability.

#### LOWEST DEFECT RATE

Total automation ensures strict quality controls during the entire manufacturing process at our ISO certified facilities.

#### **DOMESTIC PRODUCTION**

Silfab Solar manufactures PV modules in two automated locations within North America. Our 500+ North American team is ready to help our partners win the hearts and minds of customers, providing customer service and product delivery that is direct, efficient and local.

#### **H**AESTHETICALLY PLEASING

All black sleek design, ideal for high-profile residential or commercial applications.

#### **PID RESISTANT**

PID Resistant due to advanced cell technology and material selection. In accordance to IEC 62804-1.

| Electrical Specifications   | SIL-300 ML mono PERC  |   |  |   |  |
|---|---|---|--|---|--|
| Test Conditions   |   |   | STC  | NOCT  |  |
| Module Power (Pmax)   |   | Wp  | 300  | 227   |  |
| Maximum power voltage (Vpmax)   |   | V 32.8 29.5   |  |   |  |
| Maximum power voltage (vpmax)<br>Maximum power current (lpmax)  |   | A   |  |   |  |
| Open circuit voltage (Voc)  |   | V 39.85 36.9  |  |   |  |
| Short circuit current (Isc)   |   | A 9.71 7.96   |  |   |  |
|   |   | 8<br>%  | 17.6   |   |  |
| Module efficiency   |   | -   | 17.6   | 16.7  |  |
| Maximum system voltage (VDC)  |   | V   |  | 1000<br>20  |  |
| Series fuse rating  |   |   |  |   |  |
| Power Tolerance   | Wp 0 to +10   IOCT 800 W/m² • AM 1.5 • Measurement uncertainty ≤ 3%   |   |  |   |  |
| Sun simulator calibration reference modules from Fraunhofe  | r Institute. Ele  | ctrical characteristic  | trical characteristics may vary by $\pm 5\%$ and power by 0 to +10W.     |   |  |
| Temperature Ratings   |   | SIL-300 ML mono PERC  |  |   |  |
| Temperature Coefficient lsc   |   | 0.064 %/°C  |  |   |  |
| Temperature Coefficient Voc   |   | -0.28 %/°C  |  |   |  |
| Temperature Coefficient Pmax  |   | -0.36 %/°C  |  |   |  |
| NOCT (± 2°C)  |   | 45 °C   |  |   |  |
| Operating temperature   |   | -40/+85 °C  |  |   |  |
| Mechanical Properties and Components  |   | SIL-300 ML mono PERC  |  |   |  |
|   |   |   | Metric   | Imperial  |  |
| Module weight   |   |   | 18.6 kg ±0.2 kg  | 41 ±0.4 lbs   |  |
| Dimensions (H x L x D)  |   |   | n x 1000 mm x 38 mm  | 66.9 in x 39.4 in x 1.5 in  |  |
| Maximum surface load (wind/snow)*   |   | 4000 Pa rear load / 5400 Pa front load N/m <sup>2</sup> 83.5/112.8 lb/ft <sup>2</sup> |  |   |  |
| Hail impact resistance  |   |   | Ø 25 mm at 83 km/h     Ø 1 in at 51.6 mph                                |   |  |
|   |   |   | nono PERC - 5 busbar   | 60 - Si mono PERC - 5 busbar  |  |
| Cells   |   | 156.75 x 156.75 mm 6.17 x 6.17 Inch   |  | 6.17 x 6.17 Inch  |  |
| Glass   |   |   | ansmittance, tempered, DSM<br>-reflective coating                        | 1 0.126 in high transmittance, tempered, DSM anti-reflective coating      |  |
| Cables and connectors (refer to installation manual)  |   |   |  | 47.2 in, Ø 0.22 in, MC4 compatible  |  |
| Backsheet   |   | High durability, superior hydrolysis resistance, multi-layer dielectric film          |  |   |  |
| Frame   |   | Anodized Aluminum (Black)   |  |   |  |
| Bypass diodes   | 3 diodes-30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)  |   |  |   |  |
| Junction Box  | UL 3730 Certified, IP67 rated   |   |  |   |  |
| Warranties  | SIL-300 ML mono PERC  |   |  |   |  |
| Module product workmanship warranty   | 25 years**  |   |  |   |  |
|   |   | 30 years  |  |   |  |
| Linear power performance guarantee  |   | ≥ 97% end 1 <sup>st</sup>   |  | $\geq$ 82% end 25 <sup>th</sup> year $\geq$ 80% end 30 <sup>th</sup> year |  |
| Certifications  |   |   |  | _ mono PERC   |  |
| Product   | ULC ORD C1703, CEC listed, IEC 62716 Ammonia Corrosion; IEC61701:2011<br>Salt Mist Corrosion Certifed, UL Fire Rating: Type 2 |   |  |   |  |
| Factory   |   |   |  | 001:2015  |  |
| Modules Per Pallet: 26  | _   | F.(( ) D (  |  |   |  |
| Pallets Per Truck: 36   | 19  | Eff Vs. Irr Perfor  | mance SIL-300 ML   |   |  |
| III Modules Per Truck: 936  | ्र 18 —   |   | 10°C   | 1.5"(38mm)  |  |
| * Warning. Read the Safety and Installation Manual  | 8 10  |   | 25°C   |   |  |
| for mounting specifications and before handling,  | 2 17  |   | 40°C   | 7x12 (x4)   |  |
| installing and operating modules.<br>**12 year extendable to 25 years subject to regis-                   | <u>16</u>   |   | 55°C   | Mounting Hole<br>E  |  |
| tration and conditions outlined under "Warranty" at   | للل 15 H  |   | 70°C   |   |  |
| www.silfabsolar.com.  | Module Efficiency (%)<br>12 12 12 12 12 12 12 12 12 12 12 12 12 1   | Max Eff   | @25C [700W/m2] 17.76%  | 47.24*(1200mm   |  |
| Third-party generated pan files from Fraunhofer-  | pol 14  |   | °C, 1000W/m <sup>2</sup> 17.65%  |   |  |
| Institute for Solar Energy Systems ISE are available  | ≥ 13  |   | @ 25°C, 600W/m <sup>2</sup> +0.63%<br>@ 25°C, 400W/m <sup>2</sup> +0.14% | m)<br>33.467(856.mm)<br>66.93(1700.mm)                                    |  |
| for download at: www.silfabsolar.com/downloads  | 12 🕌  |   | @ 25°C, 200W/m <sup>2</sup> -1.86%                                       | 3.346 (<br>66.93  |  |
|   | <br>0   |   | 600 800 1000 1200  |   |  |
|   |   | Irradia   | nce (W/m²)   | 0.1-1(0   |  |
|   |   |   |  |   |  |
|   |   |   |  | 1.02"(26mm)   |  |
|   |   |   |  | Crounding Hole  |  |
|   |   |   |  | E Drawings not to scale   |  |
|   |   |   |  | Drawings not to scale   |  |
|   |   |   |  | 39.37"(1000mm)  |  |
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|   |   |   |  |   |  |

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