

BC Series SIL-320 BL











INDUSTRY LEADING WARRANTY

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

MAXIMUM ENERGY OUTPUT

Silfab BC Series utilizes next generation Back Contact technology to reduce production/manufacturing steps and improve quality while maximizing power. Ideal for residential and commercial projects where maximum power density is preferred.

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.



PROVIDES MAXIMUM EFFICIENCY

126 high-efficiency half-cut cells combined with a black conductive back-sheet resulting in a maximum power rating of 320Wp.

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.

🧱 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.

QUALITY MATTERS

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.

SUPERIOR POWER

Super power achieved through relocation of tabbing ribbon to reduce shading on module front service and circuit resistance.

AESTHETICALLY PLEASING

Sleek aesthetics from black cells to black back-sheet without tabbing or bus-bar ribbons, ideal for residential applications.

STABLE PERFORMANCE

Enhanced life-time performance through reduced thermal stresses and increased current flow paths.

PID RESISTANT

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



Monocrystalline PV Module



СНИВВ

| Electrical Specifications | | SIL-320 BL mono PERC MWT Technology | | |
|---|---|--|--|--|
| Test Conditions | | STC | NOCT | |
| Module Power (Pmax) | Wp | 320 | 239.4 | |
| Maximum power voltage (Vpmax) | V | 34.36 | 32.18 | |
| Maximum power current (Ipmax) | A | 9.32 | 7.44 | |
| Open circuit voltage (Voc) | V | 42.04 | 39.5 | |
| Short circuit current (lsc) | A | 9.77 | 7.88 | |
| Module efficiency | % | 18.84 | 17.60 | |
| Maximum system voltage (VDC) | V | V 1000 | | |
| Series fuse rating | А | A 20 | | |
| Power Tolerance | Wp | Wp 0 to +10 | | |
| Measurement conditions: STC 1000 W/m2 • AM 1.5 • Temperature 25 • Sun simulator calibration reference modules from Fraunhofer Institu | °C • NOCT 800 W/m ute. Electrical charac | 2 • AM 1.5 • Measurement uncertainty \leq 3% teristics may vary by ±5% and power by 0 to + | -10W. | |
| Temperature Ratings | | SIL-320 BL mono PERC MWT Technology | | |
| Temperature Coefficient Isc | | +0.046 %/°C | | |
| Temperature Coefficient Voc | | -0.279 %/°C | | |
| Temperature Coefficient Pmax | | -0.377 %/°C | | |
| NOCT (± 2°C) | | 43.5 °C | | |
| Operating temperature | | -40/+85 °C | | |
| Mechanical Properties and Components | | SIL-320 BL mono PERC MWT Technology | | |
| | | Metric | Imperial | |
| Module weight | | 18.2 kg | 40.1±0.4 lbs | |
| Dimensions (H x L x D) | 170 | 0 mm x 1000 mm x 38 mm | 66.9 in x 39.4 in x 1.5 in | |
| Maximum surface load (wind/snow)* | 4000 Pa | a rear load / 5400 Pa front load | 83.5/112.8 lb/ft^2 | |
| Hail impact resistance | | ø 25 mm at 83 km/h | ø 1 in at 51.6 mph | |
| Cells | 126 high | n-efficiency half-cut mono-PERC MWT c-Si cells | 126 high-efficiency half-cut mono-PERC MWT c-Si cells | |
| Glass | 3.2 mm hi | gh transmittance, tempered, DSM anti-reflective coating | 0.126 in high transmittance, tempered, DSM anti-reflective coating | |
| Cables and connectors (refer to installation manual) | 1000 r | nm ø 5.7 mm, MC4 compatible | 39.4 in, ø 0.22 in, MC4 compatible | |
| Backsheet | | Multilayer, integrated insulation film and electrically conductive backsheet | | |
| Frame | | Anodized Aluminum (Black) | | |
| Bypass diodes | 3 diod | 3 diodes-30SQ045T (45V max DC blocking voltage, 30A max forward rectified current) | | |
| Junction Box | | UL 3730 Certified, IP67 rated | | |
| Warranties | | SIL-320 BL mono PERC MWT Technology | | |
| Module product workmanship warranty | | 25 years** | | |
| Linear power performance guarantee | > 97% or | 30 years ≥ 97% end 1 st year ≥ 90% end 12 th year ≥ 82% end 25 th year ≥ 80% end 30 th year | | |
| Certifications | | SIL-320 BL mono PERC MWT Technology | | |
| Product | | ULC ORD C1703, UL 1703, CEC listed. Product durability proven up to 3 x IEC, | | |
| Factory | | climate chamber tests up to DH3000–TC600–HF30, UL Fire Rating: Type 1 ISO9001:2015 | | |
| Modules Per Pallet: 26 | | | | |
| *Pallets Per Truck: 36 Modules Per Truck: 936 *Please refer to the Safety and Installation Manual for mounti **12 year extendable to 25 years subject to registration and co | | <u>,</u> | 39.37"(1000mm) | |

**12 year extendable to 25 years subject to registration and conditions outlined under "Warranty' at www.silfabsolar.com.

* \clubsuit Warning: Read the installation and User Manual before handling, installing and operating modules.

Third-party generated pan files from Fraunhofer-Institute for Solar Energy Systems ISE are available for download at: www.silfabsolar.com/downloads



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