



BC Series SIL-320 BL



HIGH EFFICIENCY PREMIUM MONO-PERC PV MODULE Back Contact Technology



CHUBB®
* Chubb provides error and omission insurance to Silfab Solar Inc.

INDUSTRY LEADING WARRANTY

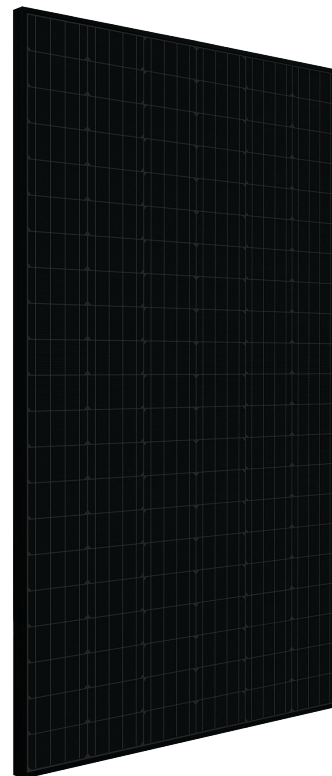
All our products include an industry leading 25-year product workmanship and 30-year performance warranty.

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

High-efficiency half-cut cells combined with a black conductive back-sheet resulting in a maximum power rating of 310Wp.

40+ YEARS OF SOLAR INNOVATION

Leveraging over 40 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 high wind load conditions for test loads validated up to 5400Pa uplift. 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.

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 (Isc)	A	9.77	7.88
Module efficiency	%	18.84	17.60
Maximum system voltage (VDC)	V		1000
Max series fuse rating	A		20
Power Tolerance	Wp		0 to +10

Measurement conditions: STC 1000 W/m² • AM 1.5 • Temperature 25 °C • NOCT 800 W/m² • AM 1.5 • Measurement uncertainty ≤ 3%
 • Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics 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)	1700 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 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-efficiency half-cut mono-PERC MWT c-Si cells	126 high-efficiency half-cut mono-PERC MWT c-Si cells
Glass	3.2 mm high transmittance, tempered, DSM anti-reflective coating	0.126 in high transmittance, tempered, DSM anti-reflective coating
Cables and connectors (refer to installation manual)	1000 mm Ø 5.7 mm, MC4 from Staubli	39.4 in, Ø 0.22 in (12AWG), MC4 from Staubli
Backsheet	Multilayer, integrated insulation film and electrically conductive backsheet, superior hydrolysis and UV resistance, fluorine-free PV backsheet	
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-320 BL mono PERC MWT Technology	
Module product workmanship warranty	25 years**	
Linear power performance guarantee	30 years	
	≥ 97.1% end 1 st year ≥ 91.6% end 12 th year ≥ 85.1% end 25 th year ≥ 82.6% end 30 th year	

Certifications	SIL-320 BL mono PERC MWT Technology	
Product	ULC ORD C1703, UL1703, CEC listed, UL 61215-1/-1-1/-2, UL 61730-1/-2, IEC 61215-1/-1-1/-2***, IEC 61730-1/-2***, CSA C22.2#61730-1/-2***, Product durability proven up to 3 x IEC, climate chamber tests up to DH3000-TC600-HF30, UL Fire Rating: Type 1	
Factory	ISO9001:2015	

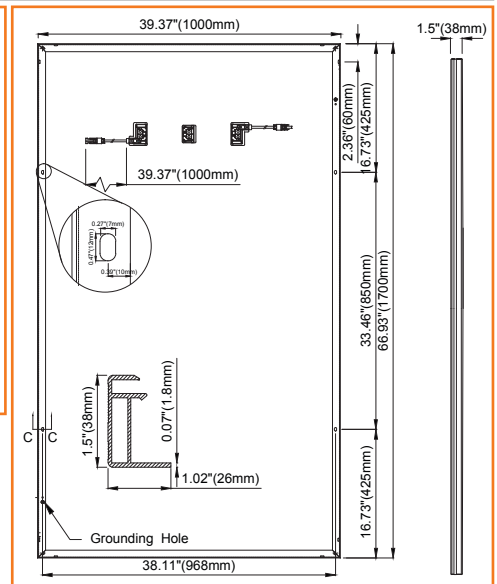
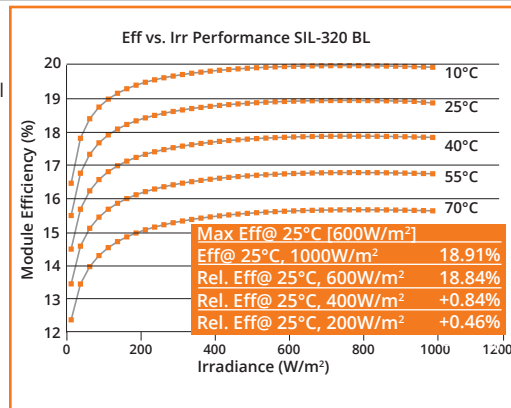
- Modules Per Pallet: 26
- Pallets Per Truck: 36
- Modules Per Truck: 936

*⚠ Warning. Read the Safety and Installation Manual for mounting specifications and before handling, installing and operating modules.

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

***Certification in progress. August 2020 expected completion date for IEC 61730/61215 and CSA C22.2#61730-1/-2.

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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