

# **SIL-320 NL**















# HIGH EFFICIENCY PREMIUM MONO-PERC PV MODULE













CHUBB.

Chubb provides error and omission insurance to Silfab Solar In

### INDUSTRY LEADING WARRANTY

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

### **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.

# **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.



### **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.

### **III** LIGHT AND DURABLE

Engineered to accommodate high wind load conditions for test loads validated up to 4000Pa uplift. The light-weight frame is exclusively designed for wide-ranging racking compatibility and durability.

## **III** 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.

### **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-320 NL mono PERC	
Test Conditions		STC	NOCT
Module Power (Pmax)	Wp	320	229
Maximum power voltage (Vpmax)	V	32.88	29.9
Maximum power current (Ipmax)	A	9.74	7.7
Open circuit voltage (Voc)	V	40.10	36.35
Short circuit current (Isc)	A	10.32	8.09
Module efficiency	%	18.8	16.8
Maximum system voltage (VDC)	V	1000	
Max series fuse rating	A	20	
Power Tolerance	Wp	0 to +10	

Measurement conditions: STC 1000 W/m2  $\cdot$  AM 1.5  $\cdot$  Temperature 25 °C  $\cdot$  NOCT 800 W/m²  $\cdot$  AM 1.5  $\cdot$  Measurement uncertainty  $\leq$  3%  $\cdot$  Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by  $\pm$ 5% and power by 0 to +10W.

Temperature Ratings	SIL-320 NL mono PERC		
Temperature Coefficient Isc	0.064 %/°C		
Temperature Coefficient Voc	-0.28 %/°C		
Temperature Coefficient Pmax	-0.36 %/℃		
NOCT (± 2°C)	46 °C		
Operating temperature	-40/+85 °C		
Mechanical Properties and Components	SIL-320 NL mono PERC		
	Metric	Imperial	
Module weight	18.6 kg ±0.2 kg	41 ±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 $N/m^2$	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	60 - Si mono PERC - 5 busbar	60 - Si mono PERC - 5 busbar	
	158.75 x 158.75 mm	6.25 x 6.25 Inch 0.126 in high transmittance, tempered, DSM	
Glass	anti-reflective coating	anti-reflective coating	
Cables and connectors (refer to installation manual)	1200 mm, ø 5.7 mm, MC4 compatible	47.2 in, ø 0.22 in (12AWG), MC4 compatible	
Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film,		
	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, IEC 62790 Certified, IP67 rated		
Warranties	SIL-320 NL mono PERC		
Module product workmanship warranty	25 years**		
Linear power performance guarantee	30 years		
	$\geq$ 97.1% end 1st year $\geq$ 91.6% end 12th year $\geq$ 85.1% end 25th year $\geq$ 82.6% end 30th year		
Certifications	SIL-320 NL mono PERC		
	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, IEC 62716 Ammonia Corrosion;

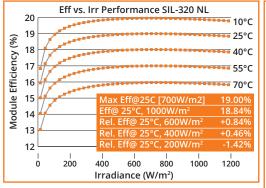
IEC61701:2011 Salt Mist Corrosion Certifed, UL Fire Rating: Type 2 ISO9001:2015

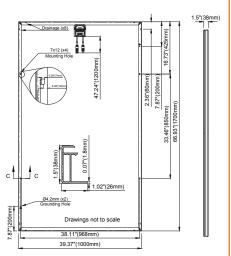
### Factory

Product

- **Modules Per Pallet: 26**
- Pallets Per Truck: 36
- **III** Modules Per Truck: 936
- \*A 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.

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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