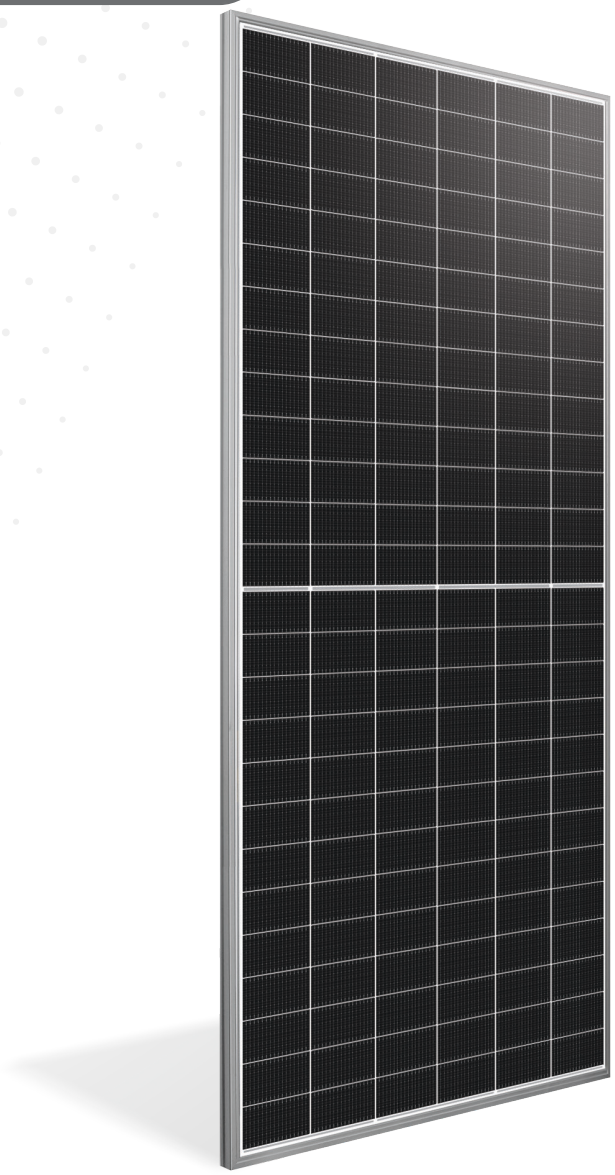
SILFAB UTILITY NTC

SIL-620/630/640 XL
BIFACIAL

SILFAB SOLAR®



SILFAB UTILITY PANEL WITH N-TYPE CELL TECHNOLOGY

Manufactured exclusively in the USA.

- Improved Shade Tolerance
- Improved Low-Light Performance
- Increased Performance in High Temperatures
- Efficient Bifacial Energy Yield
- Enhanced Durability
- Reduced Degradation Rate
- 25-Year Product Warranty/ 30-Year Performance Warranty

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ELECTRICAL SPECIFICATIONS		620			630			640		
Test Conditions		STC	BSTC	NOCT	STC	BSTC	NOCT	STC	BSTC	NOCT
Module Power (Pmax)	Wp	620	686.96	463.48	630	698.04	470.96	640	709.12	478.44
Maximum power voltage (Vpmax)	V	48.16	48.16	44.95	48.47	48.47	45.24	48.78	48.78	45.53
Maximum power current (Ipmax)	A	12.87	14.26	10.31	13.00	14.40	10.41	13.12	14.54	10.51
Open circuit voltage (Voc)	V	57.21	57.50	53.85	57.49	57.78	54.11	57.76	58.05	54.37
Short circuit current (Isc)	A	13.55	15.01	10.91	13.66	15.13	11.00	13.76	15.25	11.09
Module efficiency	%	22.20%			22.56%			22.92%		
Maximum system voltage (VDC)	V	1500								
Series fuse rating	A	30								
Power Tolerance	Wp	0 to +10								
Bifaciality Factor	%	80 ± 10								

Performance conditions: Measurement tolerance ≤ 3% • Standard Test Conditions (STC): 1000 W/m², AM 1.5, Temperature 25 °C • Nominal Operating Cell Temperature (NOCT): 800 W/m², AM 1.5 • Bifacial Standard Test Conditions (BSTC): 1000 W/m2 + φ × 135 W/m2 , φ = 80 % , AM 1.5 • Electrical characteristics may vary by ±5%.

MECHANICAL PROPERTIES / COMPONENTS	METRIC	IMPERIAL
Module weight	29.5 kg ± 0.25 kg	65.8 lbs ± 0.5 lbs
Dimensions (H x L x D)	2465 mm x 1133 mm x 35 mm	97.0 in x 44.6 in x 1.4 in
Maximum surface load (wind/snow)*	2400 Pa rear load / 5400 Pa front load	50.1 lb/ft² rear load / 112.8 lb/ft² front load
Hail impact resistance	ø 25 mm at 83 km/h	ø 1 in at 51.6 mph
Cells	156 Half cells - N-Type Silicon solar cell 182 mm x 92 mm	156 Half cells - N-Type Silicon solar cell 7.17 in x 3.62 in
Glass	3.2 mm high transmittance, tempered, antireflective coating	0.126 in high transmittance, tempered, antireflective coating
Cables and connectors (refer to installation manual)	(+)1350 mm, (-)350 mm, ø 5.7 mm, MC4-EVO2A from Staubli	(+)53.1 in, (-)13.8 in, ø 0.22 in (12AWG), MC4-EVO2A from Staubli
Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film, transparent PV backsheet	
Frame	Anodized Aluminum (Silver)	
Junction Box	IP68 rated, 3 diodes	

TEMPERATURE RATINGS	
Temperature Coefficient Isc	0.04 %/°C
Temperature Coefficient Voc	-0.24 %/°C
Temperature Coefficient Pmax	-0.29 %/°C
NOCT (± 2°C)	45 °C
Operating temperature	-40/+85 °C

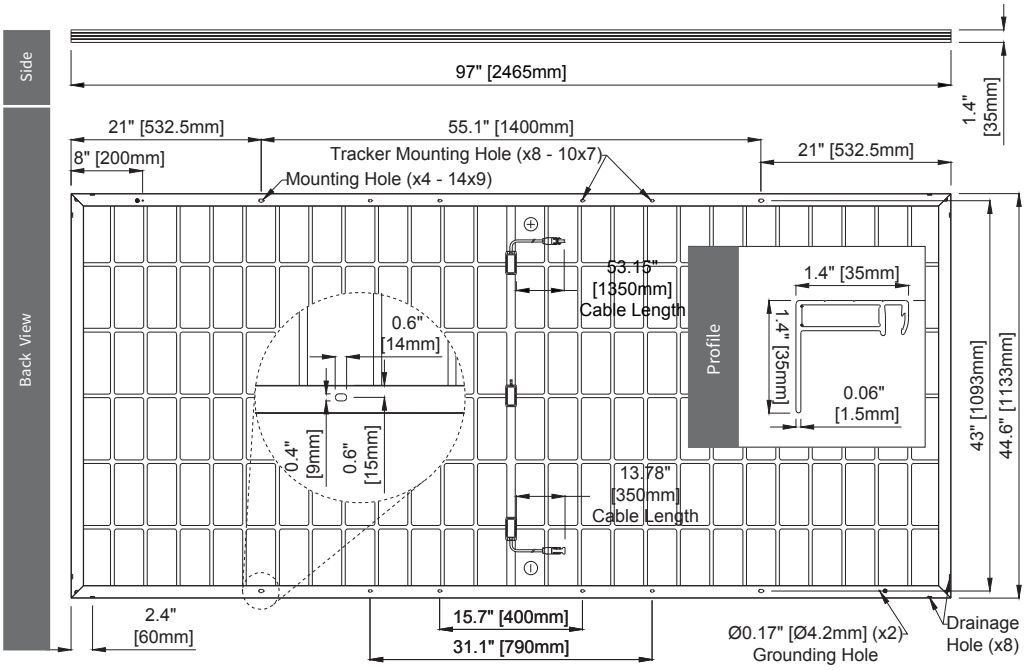
WARRANTIES	
Module product workmanship warranty	25 years**
Linear power performance guarantee	30 years
	≥ 98% end 1st yr ≥ 94.7% end 12th yr ≥ 90.8% end 25th yr ≥ 89.3% end 30th yr

CERTIFICATIONS	
Product	UL 61215, UL 61730, CSA C22.2#61730, IEC 61215, IEC 61730, IEC 61701 (Salt Mist Corrosion), IEC 62716 (Ammonia Corrosion), UL Fire Rating: Type 1
Factory	ISO9001:2015

SHIPPING SPECS	
Modules Per Pallet:	31 or 31 (California)
Pallets Per Truck	19 or 18 (California)
Modules Per Truck	589 or 558 (California)

* ⚠ 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 silfabsolar.com.



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