SILFAB NTC

SIL-420/430 QD





INTRODUCING NEXT-GENERATION N-TYPE CELL TECHNOLOGY

- Improved Shade Tolerance
- Improved Low-Light Performance
- Increased Performance in High Temperatures
- Enhanced Durability
- Reduced Degradation Rate
- Industry-Leading Warranty











ELECTRICAL SPECIFICATIONS		420		430	
Test Conditions		STC	NOCT	STC	NOCT
Module Power (Pmax)	Wp	420	313	430	321
Maximum power voltage (Vpmax)	V	33.08	30.86	33.25	31.02
Maximum power current (Ipmax)	А	12.70	10.15	12.93	10.33
Open circuit voltage (Voc)	V	38.84	36.52	38.91	36.58
Short circuit current (Isc)	А	13.50	10.85	13.87	11.15
Module efficiency	%	21.5%	20.1%	22.1%	20.6%
Maximum system voltage (VDC)	V	1000			
Series fuse rating	А	25			
Power Tolerance	Wp	0 to +10			

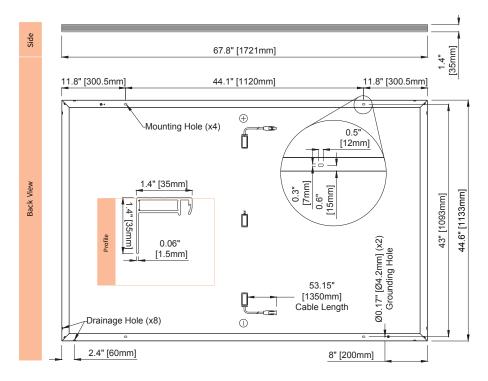
 $\label{lem:measurement} Measurement conditions: STC 1000 \ W/m^2 \bullet AM \ 1.5 \bullet Temperature \ 25 ^{\circ}C \bullet NOCT \ 800 \ W/m^2 \bullet AM \ 1.5 \bullet Measurement uncertainty \ \le \ 3\% \\ Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by $\pm 5\%$ and power by 0 to $\pm 10 \ W. \\$

MECHANICAL PROPERTIES / COMPONENTS	METRIC	IMPERIAL	
Module weight	21 kg ± 0.2 kg	46.3 lbs ± 0.4 lbs	
Dimensions (H x L x D)	1721 mm x 1133 mm x 35 mm	67.8 in x 44.6 in x 1.37 in	
Maximum surface load (wind/snow)*	4000 Pa rear load / 5400 Pa front load	83.5 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	108 Half cells - N-Type Silicon solar cell 182 mm x 91 mm	108 Half cells - N-Type Silicon solar cell 7.16 in x 3.58 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, ø 5.7 mm, MC4 from Staubli	53.1 in, ø 0.22 in (12 AWG), MC4 from Staubli	
Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film, fluorine-free PV backsheet		
Frame	Anodized aluminum (Black)		
Junction Box	UL 3730 Certified, IEC 62790 Certified, IP68 rated, 3 diodes		

TEMPERATURE RATINGS		WARRANTIES		
Temperature Coefficient Isc	0.04 %/°C	Module product workmanship warranty	25 years**	
Temperature Coefficient Voc	-0.24 %/°C	Linear power performance guarantee	30 years	
Temperature Coefficient Pmax	-0.29 %/°C		≥ 98% end 1st yr ≥ 94.7% end 12th yr	
NOCT (± 2 °C)	45 °C		≥ 94.7% end 12th yr ≥ 90.8% end 25th yr	
Operating temperature	-40/+85 °C		≥ 89.3% end 30th yr	

CERTIFICATIONS		SHIPPING SPECS	
Product	UL 61215, UL 61730, CSA C22.2#61730, IEC 61215, IEC 61730, IEC 61701 (Salt Mist Corrosion), IEC 62716 (Ammonia Corrosion), CEC Listed, UL Fire Rating: Type 2	Modules Per Pallet:	26 or 26 (California)
		Pallets Per Truck	32 or 30 (California)
Factory	ISO9001:2015	Modules Per Truck	832 or 780 (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. PAN files generated from 3rd party performance data are available for download at: silfabsolar.com/downloads.



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