

N-TOPCON BIFACIAL SOLAR MODULE KV-S625

KV-S625 | 605-625Wp

N-TOPCon Cell Technology

Bifacial Power Generation

23.69% Module Efficiency

1500V System Voltage

IP68 Junction Box

30-Year Linear Power Warranty

Datasheet

Model	KV-S605	KV-S610	KV-S615	KV-S620	KV-S625
ELECTRICAL CHARACTERISTICS (STC*)					
Rated Power in Watts - Pmax (Wp)	605	610	615	620	625
Open Circuit Voltage - Voc (V)	40.29	40.43	40.57	40.72	40.86
Short Circuit Current - Isc (A)	15.02	15.09	15.16	15.23	15.30
Max. Power Voltage - Vmpp (V)	48.40	48.62	48.82	49.02	49.22
Max. Power Current - Impp (A)	15.92	15.98	16.04	16.10	16.16
Module Efficiency (%)	22.40	22.58	22.77	22.95	23.69
Maximum System Voltage	1500V DC				
Fuse Rating (A)	30				
Temperature Coefficient Pmax	-0.30%/°C				
Temperature Coefficient Isc	0.046%/°C				
Temperature Coefficient Voc	-0.25%/°C				
Bifacial Factor	80±5%				
*STC: IRRADIANCE 1000W/M², MODULE TEMPERATURE 25°C, AM=1.5					
WORKING CHARACTERISTICS (NOCT*)					
Rated Power in Watts - Pmax (Wp)	457	461	465	469	473
Open Circuit Voltage - Voc (V)	37.75	37.92	38.09	38.26	38.44
Short Circuit Current - Isc (A)	12.11	12.16	12.21	12.26	12.31
Max. Power Voltage - Vmpp (V)	46.03	46.22	46.41	46.60	46.70
Max. Power Current - Impp (A)	12.86	12.92	12.98	13.04	13.10
Power Tolerance	0~+3%				
NOCT	45°C±2°C				
Operating Temperature	-40°C ~ 85°C				
*NOCT: IRRADIANCE 800W/M², AMBIENT TEMPERATURE 20°C, WIND SPEED 1M/S					
REAR SIDE POWER GAIN CHARACTERISTICS					
Rear Gain 5% - Pmax (Wp)	635.30	640.50	645.80	651.00	656.30
Rear Gain 5% - Efficiency (%)	23.50	23.70	23.90	24.10	24.30
Rear Gain 15% - Pmax (Wp)	695.80	701.50	707.30	713.00	718.80
Rear Gain 15% - Efficiency (%)	25.80	26.00	26.20	26.40	26.60
Rear Gain 25% - Pmax (Wp)	756.30	762.50	768.80	775.00	781.30
Rear Gain 25% - Efficiency (%)	28.00	28.20	28.50	28.70	28.90
ADDITIONAL GAIN FROM THE REAR SIDE VS. FRONT-SIDE POWER AT STC; DEPENDS ON MOUNTING (STRUCTURE, HEIGHT, TILT ANGLE ETC.) AND GROUND ALBEDO.					
MECHANICAL CHARACTERISTICS					
Number of Cells: 132 pcs	Type of Frame: Anodized Aluminum Alloy				
Size of Cell (mm): 210×91	Size of Module (mm): 2382×1134×35/30				
Type of Cell: N-TOPCon Mono	Weight (kg): 33.5				
Thickness of Glass (mm): 2.0	Cables/Connectors: 4.0mm², MC4 compatible				
Junction Box: IP68, 1500V DC, 3 Diodes	Length of Cable: +300mm/~200mm (connector included), length can be customized				
PACKAGING CONFIGURATION					
	35mm frame		30mm frame		
Height of Modules (mm)	35		30		
Number of Modules Per Pallet	31		36		
Packaging Box Dimensions (l×w×h) (mm)	2485×1120×1260		1260×1120×2595		
Box Gross Weight (kg)	1080		1250		
Number of Modules Per 40ft (HQ) Container	496		720		
Number of Pallets Per 40ft (HQ) Container	16		10		
15-YEAR PRODUCT WARRANTY / 30-YEAR LINEAR POWER WARRANTY (FIRST-YEAR DEGRADATION 1.0%, ANNUAL DEGRADATION 0.40%, 87.4% POWER AT YEAR 30)					

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
Specifications included in this datasheet are subject to change without notice.