

N-TOPCON BIFACIAL SOLAR MODULE KV-S500

KV-S500 | KV-500W-182M/120TB | 495-500Wp

N-TOPCon Cell Technology

Bifacial Power Generation

22.09% Module Efficiency

1500V System Voltage

IP68 Junction Box

30-Year Linear Power Warranty

Datasheet

Model Number	KV-495W 182M/120TB			KV-500W 182M/120TB	
ELECTRICAL CHARACTERISTICS (STC)					
Rated Power in Watts - Pmax (Wp)	495			500	
Open Circuit Voltage - Voc (V)	43.52			43.65	
Short Circuit Current - Isc (A)	14.37			14.47	
Max. Power Voltage - Vmpp (V)	36.76			36.88	
Max. Power Current - Impp (A)	13.46			13.56	
Module Efficiency (%)	21.86			22.09	
Maximum System Voltage	1500V DC				
Fuse Rating (A)	30				
Temperature Coefficient of Pmax	-0.29%/°C				
Temperature Coefficient of Isc	0.045%/°C				
Temperature Coefficient of Voc	-0.25%/°C				
Refer. Bifacial Factor	80±5%				
*STC: IRRADIANCE 1000W/M², MODULE TEMPERATURE 25°C, AM=1.5					
WORKING CHARACTERISTICS (NOCT)					
Power Class (NOCT)	421W	425W	429W	432W	436W
Rated Power in Watts - Pmax (Wp)	421	425	429	432	436
Open Circuit Voltage - Voc (V)	48.13	48.32	48.51	48.70	48.89
Short Circuit Current - Isc (A)	11.41	11.46	11.50	11.55	11.60
Max. Power Voltage - Vmpp (V)	39.39	39.52	39.65	39.78	39.87
Max. Power Current - Impp (A)	10.69	10.75	10.81	10.87	10.94
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					
MECHANICAL CHARACTERISTICS					
Number of Cells: 120 pcs	Type of Frame: Anodized Aluminum Alloy				
Size of Cell (mm): 182×91	Size of Module (mm): 1996×1134×35/30				
Type of Cell: N-TOPCon Mono	Weight (kg): 28				
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)	2300×1120×1260			2300×1120×1260	
Box Gross Weight (kg)	1084			1210	
Number of Modules Per 40ft (HQ) Container	620			720	
Number of Pallets Per 40ft (HQ) Container	20			20	
15-YEAR PRODUCT WARRANTY / 30-YEAR LINEAR POWER WARRANTY (FIRST-YEAR DEGRADATION 1.0%, ANNUAL DEGRADATION 0.40%, 87.4% POWER AT YEAR 30)					