

HIGH

ENERGY YIELD
RELIABILITY
DURABILITY

N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF CELLS MONO-FACIAL

460W - 480W

N-TYPE TOPCON TECHNOLOGY PV MODULES

EG TC -120 Series 460W-480W

120
HALF
CELLS

LID
RESISTANT

PID
RESISTANT

SALT CORROSION
RESISTANT

SAND
RESISTANT

NH₃
S
AMMONIA
RESISTANT

HIGHLY STABLE
AND TOUGH

30
years
Performance
Guarantee

15
years
Product
Warranty

Mechanical and design specification

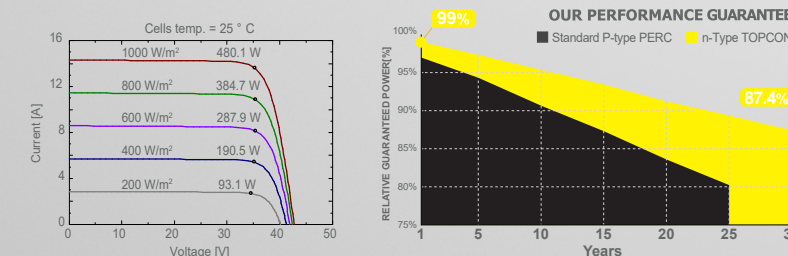
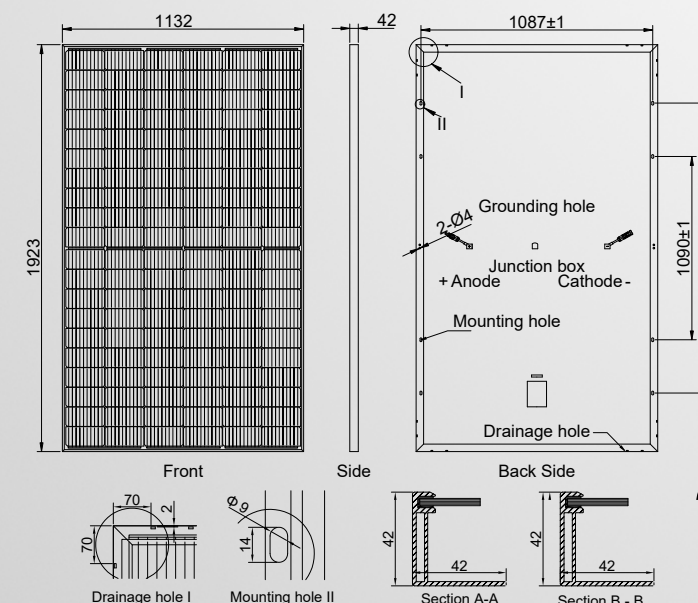
Cell type	N-type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	120
Glass	3.2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP68, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1923 mm x 1132 mm x 42 mm
Weight	23.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m ²
Mechanical load	5400 Pa/ 550 kg/ m ²

Packaging information

Packaging configuration	27 pcs per one pallet
Loading capacity	648 pcs / 40 HQ
Size per pallet	1950 mm x 1150 mm x 1150 mm
Weight	15600 kg for 40 HQ

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P _{max}	(%/°C)	-0.3
Temp.coefficient of V _{oc}	(%/°C)	-0.25
Temp.coefficient of I _{sc}	(%/°C)	0.045
Nom. operating temp. NOCT	(°C)	42 ± 2



Electrical specifications (STC*):		EG-120TC 460W	EG-120TC 465W	EG-120TC 470W	EG-120TC 475W	EG-120TC 480W
Nominal Max. Power	P _{max} (Wp)	460	465	470	475	480
Maximum operating voltage	V _{MPP} (V)	34.69	34.85	35.03	35.21	35.36
Maximum operating current	I _{MPP} (A)	13.27	13.35	13.42	13.50	13.59
Open-circuit voltage	V _{oc} (V)	41.99	42.16	42.32	42.50	42.67
Short-circuit current	I _{sc} (A)	14.01	14.09	14.17	14.25	14.33
Module efficiency	η (%)	21.35	21.58	21.81	22.04	22.27
Power tolerance	(W)			0~+5		
Maximum system Voltage	(V)			1500		
Maximum series fuse rating	(A)			25		

*STC: Standard test conditions (Irradiance 1000 W/m², Cell temperature 25°C and air mass of AM1.5)

Electrical specifications (NMOT*):		EG-120TC 460W	EG-120TC 465W	EG-120TC 470W	EG-120TC 475W	EG-120TC 480W
Nominal Max. Power	P _{max} (Wp)	346	350	353	357	361
Maximum operating voltage	V _{MPP} (V)	32.28	32.59	32.61	33.45	33.59
Maximum operating current	I _{MPP} (A)	10.72	10.74	10.85	10.68	10.75
Open-circuit voltage	V _{oc} (V)	39.32	40.38	40.13	40.82	40.77
Short-circuit current	I _{sc} (A)	11.47	11.28	11.46	11.38	11.49

*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

The specifications and characteristics contained in this datasheet may deviate slightly from our actual products due to the product developments and uncertainty of measurement devices. The specifications included in the datasheet are subject to change without prior notice.



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)

