

144 MBB 72S 2P cells



PERC Half Cell Mono Technology



Higher power output



Light-weight design



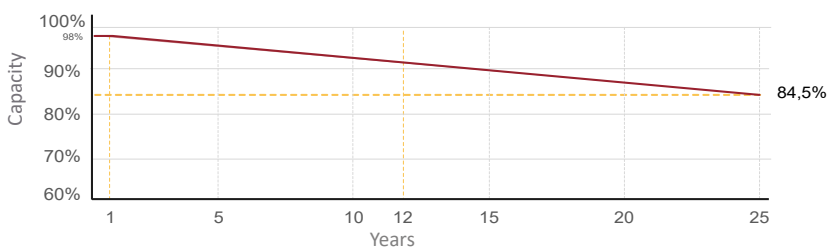
Low light performance



Higher module conversion efficiency

WARRANTY

Linear Power Warranty



Watts positive tolerance



Years product warranty



Years linear power warranty



Electrical Performance EM460-PH

Module type	460M Half cell Mono PERC
Maximum power (Wp)	460 Wp
Maximum power current (Im)	10,92 A
Maximum power voltage (Vm)	42,13 V
Short circuit current (Isc)	11,45 A
Open circuit voltage (Voc)	50,01 V
Module efficiency	21%
Maximum series fuse	20 A
Number of diode	3
Watts positive tolerance	0+3%
Standard test conditions	1.000 W/m ² , 25 °C, AM 1.5
Maximum system voltage	1.500 V
Temperature-Coefficient Isc	0,044% / °C
Temperature-Coefficient Voc	-0,272% / °C
Temperature-Coefficient Pmp	-0,350% / °C
Operating temperature	-40°C / +85°C
Normal operating cell temperature	45°C ±2
Load capacity for the cover of the module	5.400 Pa IEC61215 (snow)
Load capacity for front & back of the module	2.400 Pa IEC61215 (wind)

*Standard Measurement Conditions STC: Irradiance 1.000 W/m², spectrum AM1.5, cell at 25°C.

Electrical Performance NOCT**

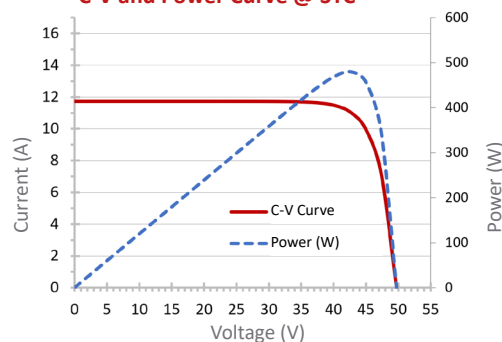
Maximum power (wp)	347,75W
Maximum power voltage (Vm NOCT)	39,60 V
Maximum power current (Im NOCT)	8,78 A
Open circuit voltage (Voc NOCT)	46,75 V
Short circuit current (Isc TONC)	9,32 A

**TONC conditions: Irradiance of 800 W/m², AM1.5, ambient temperature 20 °C and wind of 1 m/s.

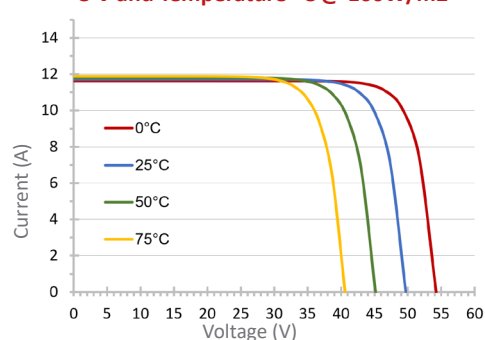
Mechanical Characteristics

Front cover (material/thickness)	Low-iron tempered glass / 3.2mm
Module weight	24,0 kg
Module dimensios (L / W / H)	2.094 x 1.038 x 35mm
Backsheet (color)	TPT in black
Cell (quantity/material/dimensions)	144 (6x12x2) / monocrystalline silicon
Frame (material/color)	Anodized aluminum / black
Junction box (protection degree)	≥ IP68
Cable & Plug connectors	4mm ² , leng. 1.200mm
Application class	Class A
Electrical protection class	Class II
Fire safety class	Class C

C-V and Power Curve @ STC



C-V and Temperature °C @ 100W/m²



C-V and Irradiation W/m² @ 25°C

