



# SALO 590W-600W TopCon

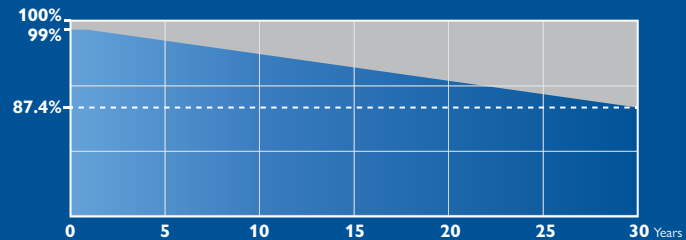
N-Type / Half-Cut

## LINEAR PERFORMANCE WARRANTY

**15** Years  
Product Warranty on  
Materials and Workmanship

**30** Years  
Linear Performance Warranty

**0.40%**  
Subsequent Annual Degradation



### GLASS

Anti-reflective coating, low iron content,  
high solar transmittance



### CELLS

High efficiency, top quality,  
cell thickness  $200 \pm 40 \mu\text{m}$



### BUSBAR

High quality, over 80% copper content,  
softer material to reduce cell breakage



### FRAME

Min. 35mm aluminium frames with  $15 \mu\text{m}$   
anodized film, assembled with 2-component glue



### BACKSHEET

Safe and reliable 3-layer sheet,  
1000 and 1500V electric insulation



### ENCAPSULANT

Designed to optimize module durability  
and performance, PID resistant



### MADE IN THAILAND

responsibly by a Thai-Finnish solar company,  
using fully automated Finnish production lines.

**600W**  
MAXIMUM  
POWER OUTPUT

**23.2%**  
MAXIMUM  
EFFICIENCY

**0~+5W**  
POWER OUTPUT  
TOLERANCE



### High Power Output

Enhanced light capture and current collection for  
improved power output and module reliability.



### Outstanding Low-Light Performance

Greater power output even in low-light conditions,  
such as on cloudy or foggy days.



### Zero LID (Light Induced Degradation)

The N-type solar cell has no LID naturally which can  
increase power generation.



### Superior Temperature Coefficient

Enhanced power output in operational environments,  
made possible by passivating contact cell technology.



### PID Resistance

Optimized mass-production process and material control  
ensure outstanding Anti-PID performance.



### Enhanced Mechanical Load

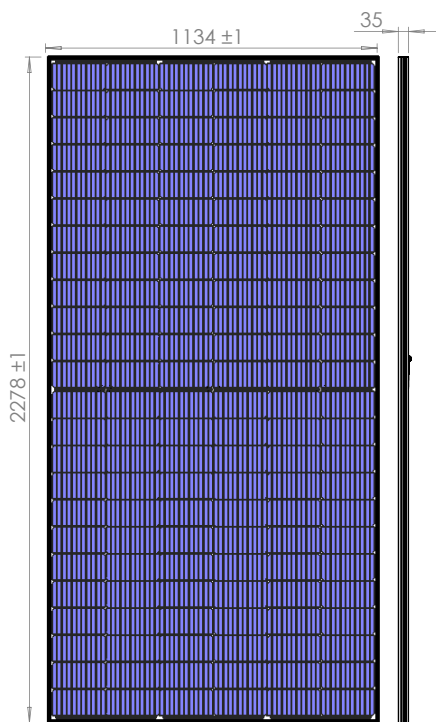
Certified to endure wind loads up to 2400 Pascal  
and snow loads up to 5400 Pascal.



### Durable in Extreme Environments

Dependable quality ensures greater sustainability, even in  
challenging environments such as deserts, farms, and coastlines.

# SALO 590W-600W TopCon



## MECHANICAL SPECIFICATION

Solar Cell	N-Type TopCon silicon cell
Front Glass	3.2 mm thick tempered glass with high strength and ARC
Frame	Black or Silver anodized aluminium
Junction Box	IP68, 3 bu-pass diodes
Connector	MC4 Compatible
Cable	200 mm (±20%) lenght and 4 mm <sup>2</sup> section
Area	2.58 m <sup>2</sup>

## OPERATING PARAMETERS

Maximum Voltage	1500 V
Maximum Series Fuse Rating. Ir	25 A
Power Output Tolerance	0-5 W
Voc and Isc Tolerance	±3%
Fire Rating	Class C (UL 790)
Protection Class	Class II (IEC 61140)
Mechanical Loads	Front load 5400 Pa, Back load 2400 Pa

## ELECTRICAL PROPERTIES (STC\*)

Power Output (Wp)	590	595	600
Max Power Tolerance (W)	0-5	0-5	0-5
Module Efficiency (%)	22.78	22.95	23.14
Voltage Mpp-Vmpp (V)	45.10	45.22	45.36
Current Mpp-Impp (A)	13.09	13.16	13.23
Voltage Open Circuit-Voc (V)	52.04	52.19	52.34
Short Circuit Current-Isc (A)	14.00	14.04	14.06

\*STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM 1.5

## MECHANICAL CHARACTERISTICS

Length	2278 mm
Width	1134 mm
Depth	35 mm
Weight	28.4 kg
No. of Cells and Connections	144 (6x12)
Cell Size	91 x 182 mm
No. of Busbars	10

## ELECTRICAL PROPERTIES (NOCT\*)

Power Output (Wp)	442	446	451
Voltage Mpp-Vmpp (V)	43.02	43.14	43.28
Current Mpp-Impp (A)	10.28	10.35	10.42
Voltage Open Circuit-Voc (V)	50.22	50.37	50.52
Short Circuit Current-Isc (A)	11.29	11.33	11.35

\*NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## TEMPERATURE COEFFICIENTS

Temperature Coefficient of Isc (α)	0.045 %/°C
Temperature Coefficient of Voc (β)	-0.275 %/°C
Temperature Coefficient of Pmax (γ)	-0.29 %/°C
Temperature Range	-40 °C ~ +85 °C
Nominal Operation Cell Temperature (NOCT)	45 ± 2 °C

## PACKAGING CONFIGURATION

Unit	40" HC
Pieces/Pallet	32
Pallets/Container	20
Pieces/Container	640

SALO® - Solar Panel is a registered trademark of Salo Tech Ltd.

SALO® - Solar Panels have been manufactured under the controls established by a Bureau Veritas Certification approved management system that conforms with ISO 9001, 14001, 45001.