

SunCore™ 570-590

570-590 W N-Type TOPCon mono-facial module

MONO-FACIAL

PROVEN OUTPUT. LONG-TERM VALUE.

Premium all-black module supplied, installed and supported by Lewis Green Energy. Final specification depends on the selected model and system design.



590 W

Peak rated output

22.84%

Peak module efficiency

30 years

Linear performance warranty

ELECTRICAL SPECIFICATIONS (STC)

Module type	570 W	575 W	580 W	585 W	590 W
Maximum power – P _{max} [Wp]	570	575	580	585	590
Maximum power voltage – V _{mp} [V]	42.99	43.17	43.35	43.53	43.71
Maximum power current – I _{mp} [A]	13.26	13.32	13.38	13.44	13.50
Open-circuit voltage – V _{oc} [V]	51.99	52.15	52.31	52.47	52.63
Short-circuit current – I _{sc} [A]	13.89	13.95	14.01	14.07	14.13
Module efficiency [%]	22.07	22.26	22.45	22.65	22.84

STC: irradiance 1000 W/m², cell temperature 25 °C, AM 1.5.

ELECTRICAL SPECIFICATIONS (NOCT)

Module type	570 W	575 W	580 W	585 W	590 W
Maximum power – P _{max} [Wp]	430	433	437	441	445
Maximum power voltage – V _{mp} [V]	40.37	40.54	40.70	40.86	41.05
Maximum power current – I _{mp} [A]	10.64	10.69	10.74	10.79	10.83
Open-circuit voltage – V _{oc} [V]	49.38	49.54	49.69	49.84	49.99
Short-circuit current – I _{sc} [A]	11.21	11.26	11.31	11.36	11.41

NOCT: irradiance 800 W/m², ambient temperature 20 °C, AM 1.5, wind speed 1 m/s.

MECHANICAL SPECIFICATIONS

Cell type	N-type mono-crystalline
Number of cells	144 (72 × 2)
Dimensions	2278 × 1134 × 30 mm
Weight	27.0 kg
Front glass	3.2 mm anti-reflection coated, high-transmission low-iron tempered glass
Frame	Anodised aluminium alloy
Junction box	IP68 rated
Protection class	Class II

IEC fire type	Class C
Output cables	4.0 mm ² – (+) 400 mm, (–) 200 mm or customised length

TEMPERATURE, RATINGS AND INSTALLATION

Power tolerance	0 ~ +3%
Temperature coefficient of Pmax	–0.29 %/°C
Temperature coefficient of Voc	–0.25 %/°C
Temperature coefficient of Isc	+0.045 %/°C
Operating temperature	–40 °C ~ +85 °C
Maximum system voltage	1000 / 1500 V DC (IEC)
Maximum series fuse rating	25 A
Nominal operating cell temperature (NOCT)	45 ± 2 °C