Rev. 20260717

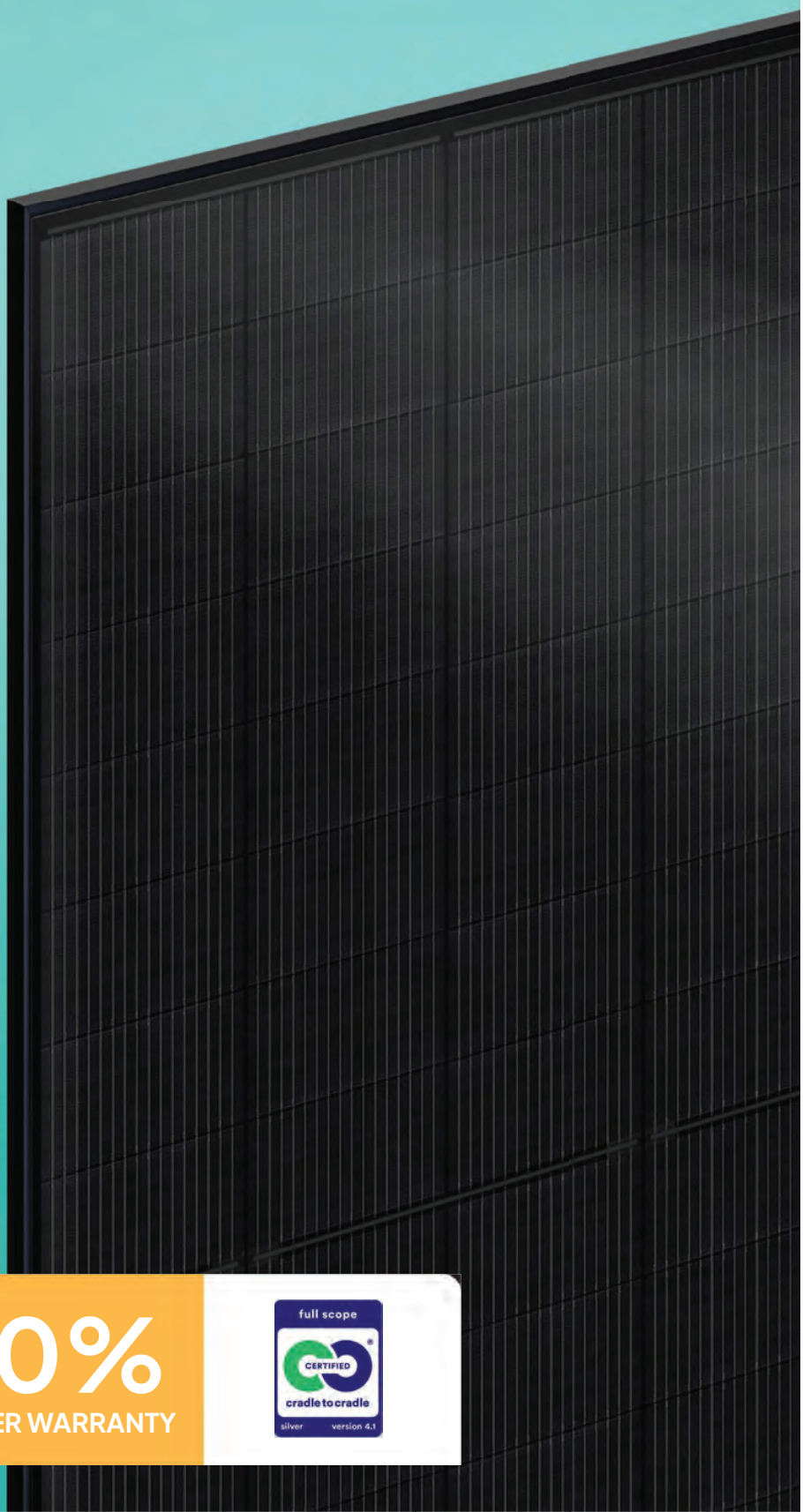
SoliTek

BLACKSTAR

455 W

Made in the EU

2+2 mm glass



NH₃
Ammonia resistance

30 mm
Hail resistance class 3

98,8 %
98,8 % recyclable

GL
35 %
35% of recycled glass content

Salt mist resistance

30 YEAR Product & Efficiency Guarantee

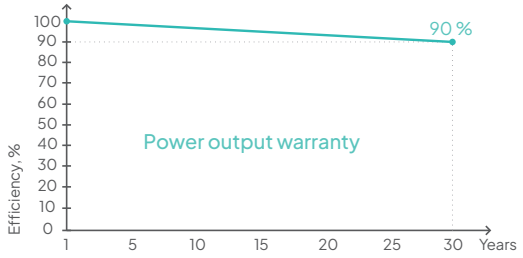
90% POWER WARRANTY

full scope CERTIFIED cradle to cradle silver version 4.1

Electrical data	STC* | BNPI**
Maximum power (W)	455 | 500
Cell technology	N type, TOPCon - bifacial
Open circuit voltage (V_{OC}/V)	35,43 | 35,43
Short circuit current (I_{SC}/A)	15,97 | 17,57
Max power voltage (Vmpp/V)	29,71
Max power current (Impp/A)	15,31
Module efficiency (n)	22,77 %
Max system voltage (V)	1500
Max current (A)	30
Power tolerance	0/+5W

*Under standard test conditions (STC) of irradiance of 1000W/sq.m., spectrum AM 1.5 and cell temperature of 25°C. Flash testing measurment accuracy of +/-5%.
**BNPI: front 1000W/m2, rear 135W/m2

Warranty	
30 years product warranty	
30 years efficiency warranty	
First year degradation (%)	1
Annual degradation (%)	0,31
Power in year 30 (%)	90



Certifications	
IEC 61215:2021; IEC 61730:2023	
C2C Certified®***	Full Scope, Silver level, Version 4.1
IEC 62716:2013	Ammonia corrosion testing
IEC 61701:2020	Salt mist corrosion testing
IEC 61215-2:2021	30 mm hailstone - Hail resistance class 3 (HW3)
ISO 9001:2015	Quality management systems
ISO 14001:2015	Environmental management systems
ISO 45001:2018	Occupational health and safety
SundaHus	A level assessment
Produced using 100% renewable energy	
Membership at Svensk Solenergi	

Product assessed in SundaHus Material Data

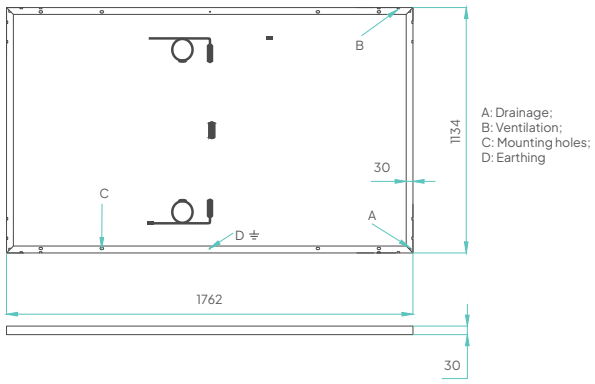
PRODUCED USING 100% RENEWABLE ENERGY

Packing information	
Modules per pallet (pcs)	33
Dimensions of a pallet (LxWxH) (mm)	1854x1205x1219
Weight of a pallet (gross) (kg)	889
Pallets per 13,6 m truck (pcs)	27
Modules per 13,6 m truck (pcs)	891

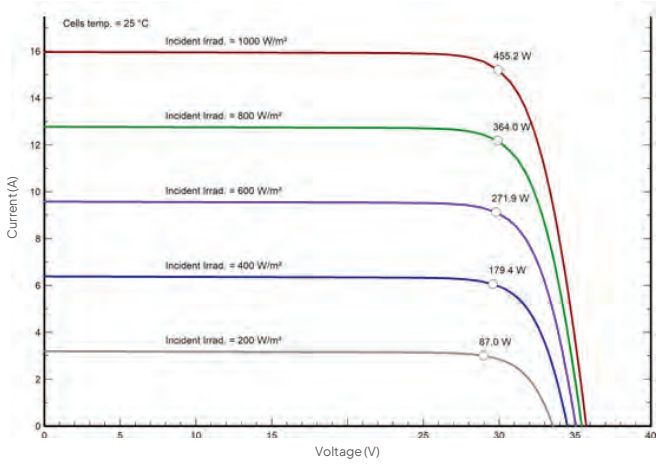
*** - the certification scope is limited to the laminate and does not include the frames

Temperature ratings	
Current temperature coefficient (α)	+0,0371% / °C
Voltage temperature coefficient (β)	-0,2173% / °C
Power temperature coefficient (δ)	-0,2791% / °C
Nominal operating module temperature	46 °C

Mechanical data	
Dimensions (LxWxH) (mm)	1762x1134x30
Weight (kg)	25,5
Front glass (mm)	2, structured, low reflection, with AR coating
Back glass (mm)	2, black
Cell Size (mm)	182,2x105
Busbars	16
Cell configuration	6x16
Frame	Black anodized aluminium frame
Rated operating altitude (m)	Up to 2000
Operating temperature (°C)	-40 ÷ +85
Maximum test load (wind/snow) (Pa)	3600/8100
Junction box / IP class	Split junction box / IP68
Cable cross section size (mm²)	4
Cable length (m)	1,2
Bypass diodes	3
Connector	MC4-EVO2



Performance at Low Irradiance



This datasheet is not legally binding. The manufacturer reserves the right to make changes to product specifications and / or product features without prior notice. The most recent versions of all documents (T&C's, datasheets, warranties and installation manuals) can always be found on our website at www.solitek.eu

QRious?
Scan to learn more