DC Solar Systems ECLECTIQ MONO BLACK PERC MWT SOLAR MODULE

MAXIMUM KWH YIELD

- PERC solar cells have a wider spectral sensitivity, which means more kWh are generated, also in early morning and late evening
- DSM AntiReflection coating which optimizes the incidence light efficiency at lower insolation angles and has a proven transmission gain of 4%
- 3% more active surface due to the MWT backcontact technology

MICROCRACK SAFE

• The MWT back-contact design marginalizes the effect of microcracks and hotspots to an absolute minimum. Internal redundancy is optimally guaranteed with 61 active contact points per cell (3660 at panel level) compared to a limited number of busbars



MINIMAL LIGHT INDUCED DEGRADATION (LID)

• Technological advances in cell design and cell performance result in exceptionally low LID impact

BETTER SUSTAINABILITY

 The fully integrated back-sheet from DSM is fluor and PFAS free and protects the module against PID and weather influences

EASY TO INSTALL

- Lightweight and handy size for one person installation
- Risk of breakage and damage is minimized by the unique DC Solar Systems framing protectors



SUSTAINABLE COMPOSITION

• Cadmium-free, lead-free cell compound, fluorine-free (back-sheet, junction box and cables), PFAS-free (back-sheet)



SMALL ROOF WITH HIGH ENERGY YIELD

Due to the minimum LID and PID, the degradation is a maximum of 2% in the first year and 0.4% in subsequent years. Resulting in a higher kWh yield until the end of its lifespan.



EUROPEAN PRODUCTION

Developed and manufactured in the Netherlands with Dutch solar know-how and European intelligent robotics. Industry 4.0 standards guarantee a consistent high-quality product

DC SOLAR SYSTEMS Powered by innovation.

ELECTRICAL SPECIFICATIONS (STC)

DC Solar Systems **ECLECT**IQ

Energy generation per module	kWh/year	352	357	362	367	372
Maximum power	Pmax (Wp)	340	345	350	355	360
Power tolerance	Pn (%)			0 / +3%		
Open circuit voltage	Voc (V)	40,4	40,45	40,5	40,55	40,6
Short circuit current	lsc (A)	10,44	10,47	10,51	10,54	10,58
Maximum power voltage	Vmpp (V)	33,4	33,5	33,6	33,7	33,8
Maximum power current	Impp (V)	10,18	10,3	10,42	10,54	10,66
Module efficienecy	%	21,3	21,6	21,9	22,2	22,5
Maximum system voltage	(V)			1000		
Maximum series fuse rating	(A)			15		

MECHANICAL SPECIFICATIONS

Module dimensions	1683mm x 1023mm x 33mm
Cell dimensions	162,75mm x 162,75mm; 60 solar cells per module
Weight	17,6 kg
Cell interconnection	Lead free (no ribbons)
Glass	3,2 mm hardened safety glass, high transmission, AR coating DSM
Cell type	Monocrystalline silicon PERC Metal Wrap Through (MWT)
Encapsulation foil	EVA with improved photo-thermal stability
Back-sheet	Endurance climate barrier based on 100% recyclable high grade PET, PFAS and fluorine free
Frame	Black anodized aluminum with sloped edges for minimal dirt build-up
Junction box	IP-67 with 3 by-pass diodes, double isolated 4mm2 solar cable with Staubli MC-4 connectors

TEMPERATURE RATINGS

Nominal Module Operating Temperature (NMOT)	43° C ±2
Temperature coefficient Voc β	-0,28 %/°C
Temperature coefficient lsc a	0,06 %/°C
Temperature coefficient Pmax Y	-0,36 %/°C

CRITERIA

IEC 61215	Electrical specifications
	Connectors, cables, diodes
	Power, hotspots, irradiance
	PID, hail, by-pass, leakage current
IEC 61730	Product safety:
	Temperature, humidity, UV
	Mechanical and fire safety
	Impulse voltage

I/V CURVES AT DIFFERENT IRRADIANCE



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