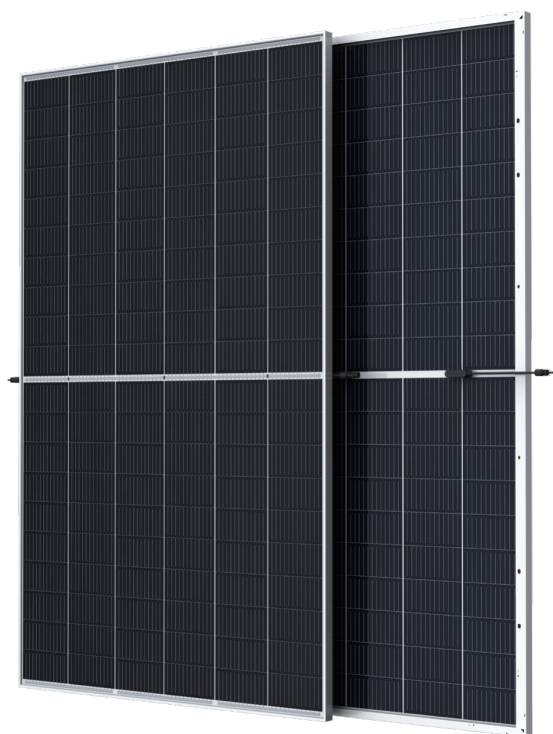


PERC Half Cut Mono Crystalline Solar Module

ESM 585/590/595/600/605



RALOS

AURINKOVOIMALAT



Excellent module efficiency up to: 21.40%



IP68 junction box for long-term weather endurance



Heavy snow load up to 5400 Pa, wind load up to 3600 Pa



PID: Selected material and stringent quality system ensure PID free

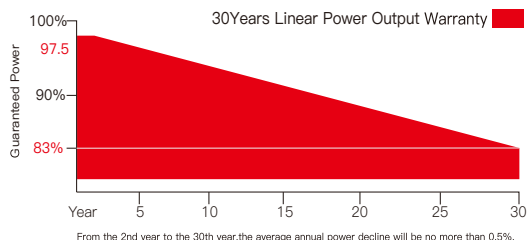


Applicable to harsh environment of deserts, farmlands and seashores



Much lower risk of Hot Spot

CERTIFICATE



WARRANTY



Linear power output warranty
– 12 years minimum 92% power output
– 30 years minimum 83% power output



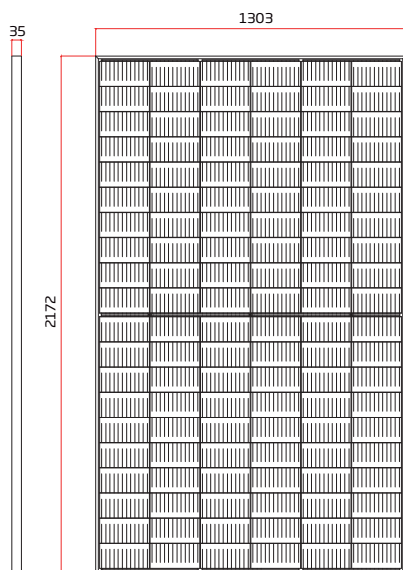
Product warranty on materials and workmanship
According to the applicable Einnova Solarline
Limited Warranty Statement

RALOS ECO OY

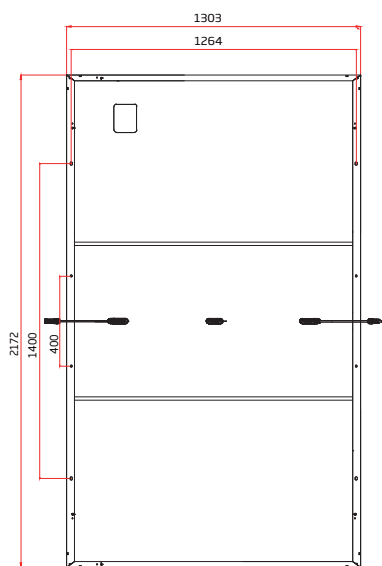
VERSTAANKATU 7
33100 TAMPERE

020 155 2222
info@ralos.fi

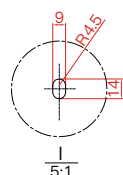
www.ralos.fi



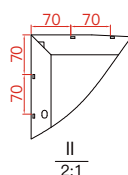
Front View



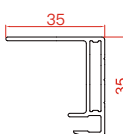
Back View



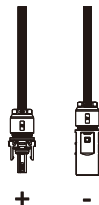
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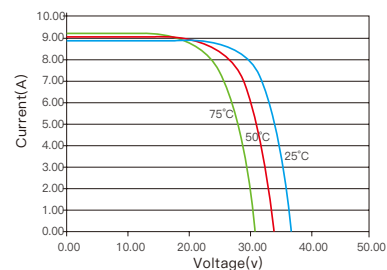
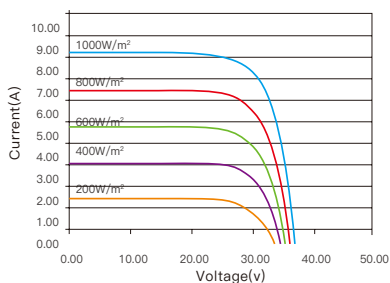
2:1



Section A-A
10:1



IV CURVE



ELECTRICAL SPECIFICATION	Unit	ESM-585H	ESM-590H	ESM-595H	ESM-600H	ESM-605H
Maximum Power (Pmax)	W	585	590	595	600	605
Module Efficiency	%	20.7	20.8	21.0	21.2	21.4
Open Circuit Voltage (Voc)	V	40.9	41.1	41.3	41.5	41.7
Short Circuit Current (Isc)	A	18.37	18.42	18.47	18.52	18.57
Maximum Power Voltage (Vmp)	V	33.8	34.0	34.2	34.4	34.6
Maximum Power Current (Imp)	A	17.31	17.35	17.40	17.44	17.49
Maximum System Voltage	V	ICE 1500VDC/UL1500(VDC)				
Maximum Series Fuse Rating	A	20				

ELECTRICAL DATA@NOCT	ESM-585H	ESM-590H	ESM-595H	ESM-600H	ESM-605H
Pmax[W]	585	590	595	600	605
Vmp[V]	31.5	31.7	31.9	32.0	32.2
Imp [A]	14.05	14.09	14.13	14.18	14.22
Voc[V]	38.5	38.7	38.9	39.1	39.3
Isc[A]	14.81	14.85	14.88	14.92	14.96

NOCT:Irradiance:800W/m², Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s

MECHANICAL SPECIFICATIONS

Solar Cell Type	Mono crystalline 210"
Number of Cells	120pcs (60x2)
Module Size	2172x1303x35mm
Weight	30.9kg
Glass	3.2mm tempered glass
Back Sheet	White or Black
Frame	Anodized aluminum alloy ,silver or black
Junction Box	IP68
Quantity of Diodes	3pcs
Cable	4.0mm ² 1100mm
Connector	MC4 Compatible
Wind/Snow Load	3600pa/5400pa

TEMPERATURE CHARACTERISTIC

NMOT (Nominal Module Operating Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	- 0.34%/°C
Temperature Coefficient of U _{OC}	- 0.25%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

PACKAGING CONFIGURATION

Modules per box:	30 pieces
Number per 20GP:	150pcs
Modules per 40' HQ:	512pcs

MAXIMUM RATINGS

Operational Temperature	-40 to +85°C
Maximum System Voltage	1500V DC(IEC) 1500 DC (UL)
Max Series Fuse Rating	30 A
Snow Load	5400 Pa (3600 Pa)
Wind Load	3600 Pa (1600 Pa)

*design load with safety factor 1.5
(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)