

As there are different certification requirements in different markets, please contact your local Orex sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

Orex is a leading, global tier 1 manufacturer of high-performance solar photovoltaic products and provider of total business solutions for residential, commercial and utility-scale power generation.

The company, founded in 1986, and publicly listed in 2010, compels value generation for its chosen global customers.

Techno-commercial innovation, underpinned by consummate quality and support, encircle Orex's total Solar PV business solutions which are among the most powerful and cost-effective in the industry. With local market presence and strong financial bankability status, we are committed, and able, to building strategic, mutually beneficial collaborations with our partners, as together we capitalise on the rising value of green energy.

RSM120-8-580M-600M

120 CELL
Mono PERC Module

580-600Wp
Power Output Range

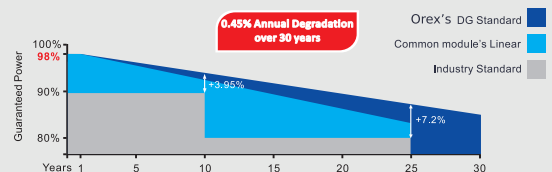
580-600Wp
Maximum System Voltage

21.2%
Maximum Efficiency

- Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing
- Bifacial technology enables additional energy harvesting from rear side (up to 30%)
- Industry leading lowest thermal co-efficient of power
- Industry leading 12 years product warranty
- Excellent low irradiance performance
- Excellent PID resistance
- Positive tight power tolerance
- Dual stage 100% EL Inspection warranting defect-free product
- Module Imp binning radically reduces string mismatch losses
- Excellent wind load 2400Pa & snow load 5400Pa under certain installation method
- Comprehensive product and system certification
 - ◆ IEC61215:2016; IEC61730-1/-2:2016;
 - ◆ ISO 9001:2015 Quality Management System
 - ◆ ISO 14001:2015 Environmental Management System
 - ◆ ISO 45001:2018 Occupational Health and Safety Management System

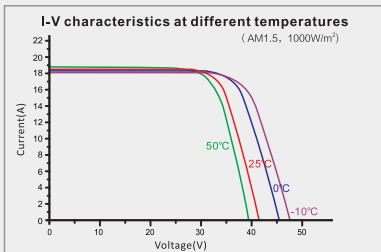
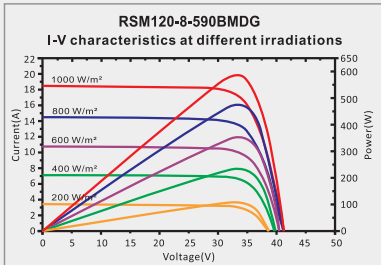
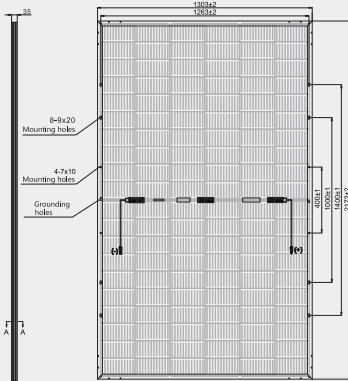
LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 30 year Linear Power Warranty



★ Please check the valid version of Limited Product Warranty which is officially released by Orex

Dimensions of PV Module Unit: mm



Our Partners:

ELECTRICAL DATA (STC)

Model Number	RSM120-8-580BMDG	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG
Rated Power in Watts-Pmax(Wp)	580	585	590	595	600
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	18.06	18.11	18.16	18.21	18.26
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Imp(A)	17.05	17.10	17.15	17.20	17.25
Module Efficiency (%) ★	20.5	20.7	20.8	21.0	21.2

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.
Bifacial factor: 70%±5 ★ Module Efficiency (%): Round-off to the nearest number

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	638	644	649	655	660
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	19.87	19.92	19.98	20.03	20.09
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Imp(A)	18.76	18.81	18.87	18.92	18.98

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Number	RSM120-8-580BMDG	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG
Maximum Power-Pmax (Wp)	439.5	443.1	447.0	450.7	454.6
Open Circuit Voltage-Voc (V)	38.04	38.22	38.41	38.60	38.78
Short Circuit Current-Isc (A)	14.81	14.85	14.89	14.93	14.97
Maximum Power Voltage-Vmpp (V)	31.59	31.76	31.94	32.11	32.29
Maximum Power Current-Imp (A)	13.91	13.95	13.99	14.04	14.08

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10+6×10)
Module dimensions	2172×1303×35mm
Weight	35kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Frame	Anodized Aluminium Alloy type 6005-2T6, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm ² (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	527
Number of modules per pallet	31
Number of pallets per container	17
Packaging box dimensions (LxWxH) in mm	1350×1145×2310
Box gross weight[kg]	1130