

Smart Module

The power of rising value



POWER OPTIMIZERS

- Up to 25% More Energy
- 100% Visible pertinent data
- Module-level MPPT (Maximum power point technology)
- Mitigate power loss from panel-to-panel mismatch
- Individual module-level monitoring
- Automatic system fault alarm & disconnect
- Installation by traditional technique
- More installation options for various roofs and orientation limitations

HIGH PERFORMANCE MONOCRYSTALLINE SMART MODULE

RSM60-6-265MSM-285MSM/4BB

60 CELL MONOCRYSTALLINE MODULE

265-285Wp POWER OUTPUT RANGE

17.5% MAXIMUM EFFICIENCY



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About Risen Energy

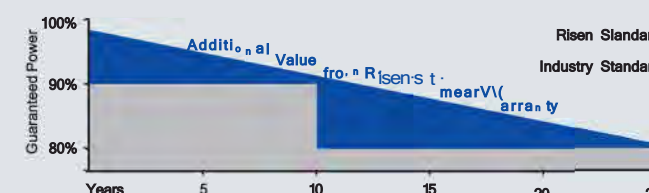
Risen Energy is a leading, global tier 1 manufacturer of high-performance solar photovoltaic products and provider of total business solutions for residential, commercial and utility-scale power generation. The company, founded in 2002, and publicly listed in 2010, compels value generation for its chosen global customers. Tech no-commercial innovation, underpinned by consummate quality and support, encircle Risen Energy'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.

KEY SALIENT FEATURES

- Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing
- Photon Independent field testing - Ranked in the top 2 of 176 international suppliers
- 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 of 3%
- Dual stage 100% EL Inspection warranting defect-free product
- Module Imp binning radically reduces string mismatch losses
- Warranted reliability and stringent quality assurances' well beyond certified requirements
- Certified to withstand severe environmental conditions
 - Anti-reflective & anti-soiling surface minimise power loss from dirt and dust
 - Excellent mechanical load 2400Pa & snow load 5400Pa resistance

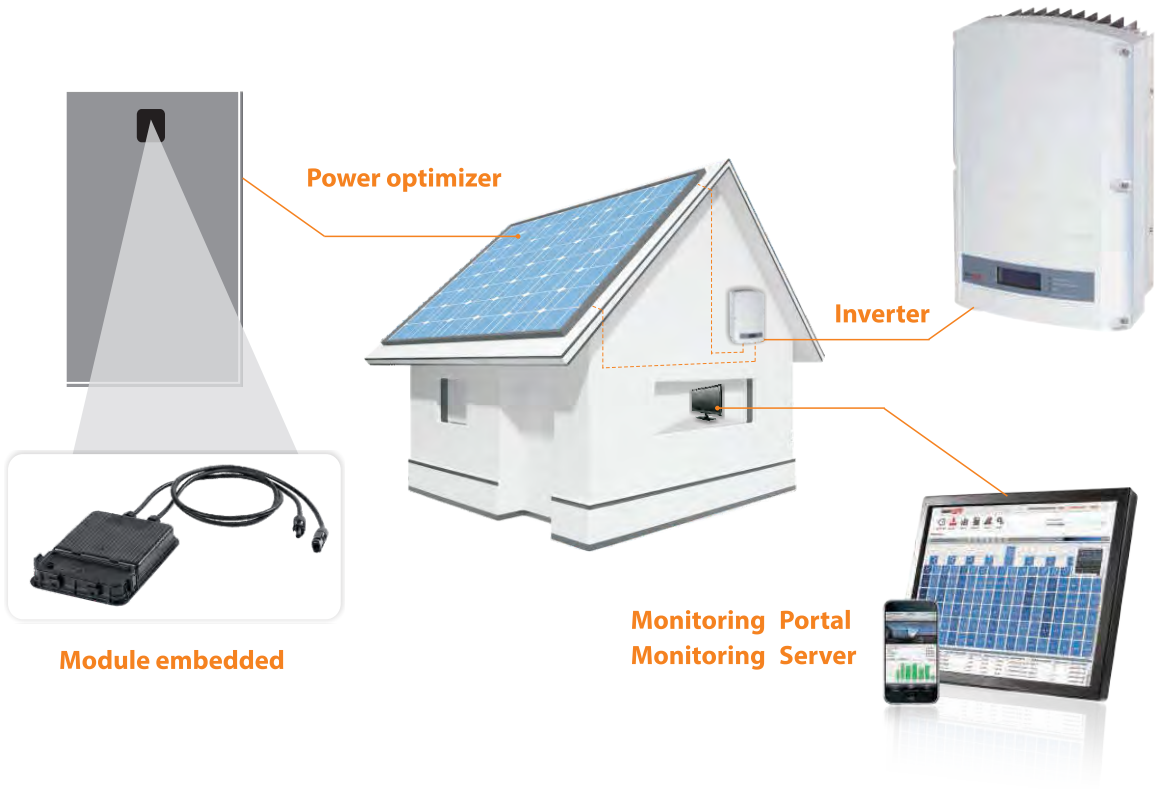
LINEAR PERFORMANCE WARRANTY

12 year Product Warranty/ 25 year Linear Power Warranty



System Architecture

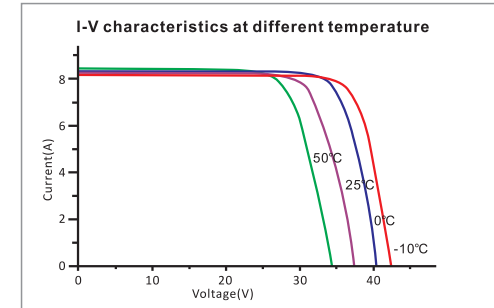
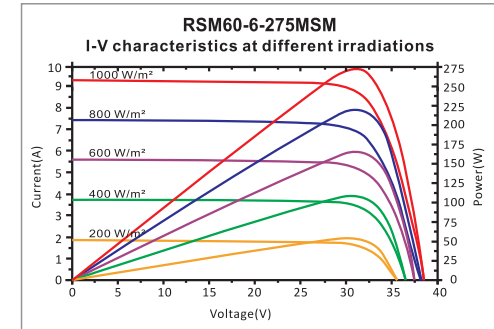
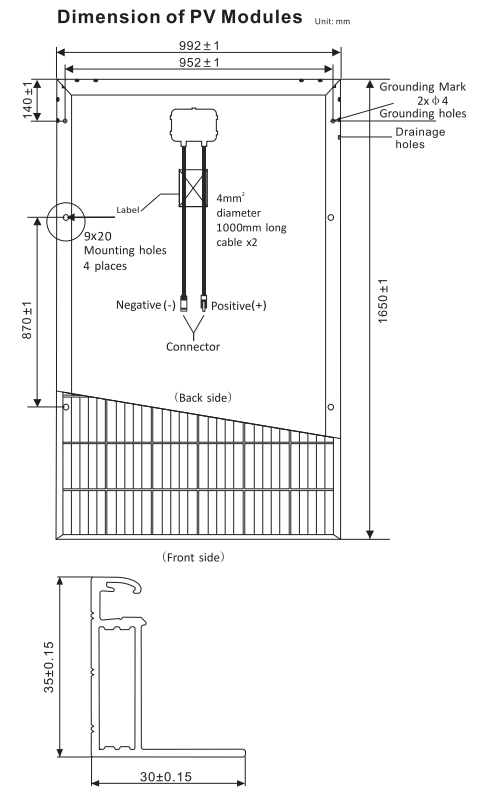
Risen smart system components work together with any inverter to maximize energy harvest. Risen smart modules can communicate by the electrical system, allowing users to monitor system performance in real time.



String lengths (computed automatically by SolarEdge Site Designer)						
Module power		265	270	275	280	285
Minimum string size with SolarEdge inverter	single-phase	8	8	8	8	8
	three-phase	16	16	16	16	16
	three-phase (medium voltage)	18	18	18	18	18
Maximum string size with SolarEdge inverter	single-phase	19	19	19	18	18
	three-phase	42	41	40	40	39
	three-phase (medium voltage)	48	47	46	45	44

Output Voltages and Currents		
Operating Output Voltage when connected to SolarEdge Inverter	5-60	V(dc)
Maximum Output Current when connected to SolarEdge Inverter	15	A(dc)
Output in Standby mode with SolarEdge inverter or with SMI (when disconnected from inverter or inverter off)	1	V(dc)

Standard Compliance	
Fire Safety	VDE-AR-E 2100-714:2013-05
PV Junction Box Safety	IEC62109-1 (class II safety, TUV-SUD), UL1741 (TUV-Rheinland & CSA)
PV Junction Box	En50548 (TUV-SUD), UL3730 (TUV-Rheinland & CSA)



Our Partners:

ELECTRICAL DATA(STC)					
Model Number	RSM60-6-265MSM	RSM60-6-270MSM	RSM60-6-275MSM	RSM60-6-280MSM	RSM60-6-285MSM
Rated Power in Watts-Pmax(Wp)	265	270	275	280	285
Open Circuit Voltage-Voc(V)	38.2	38.4	38.5	38.7	38.8
Short Circuit Current-Isc(A)	9.15	9.27	9.36	9.47	9.56
Maximum Power Voltage-Vmpp(V)	30.5	30.8	30.9	31.0	31.2
Maximum Power Current-Impp(A)	8.69	8.78	8.91	9.02	9.13
Module Efficiency (%)	16.3	16.6	16.9	17.2	17.5

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

ELECTRICAL DATA(NOCT)					
Model Number	RSM60-6-265MSM	RSM60-6-270MSM	RSM60-6-275MSM	RSM60-6-280MSM	RSM60-6-285MSM
Maximum Power-Pmax (Wp)	193.7	197.4	201.0	204.7	208.3
Open Circuit Voltage-Voc (V)	35.0	35.2	35.5	35.8	36.2
Short Circuit Current-Isc (A)	7.26	7.31	7.35	7.41	7.45
Maximum Power Voltage-Vmpp (V)	28.1	28.4	28.6	28.9	29.1
Maximum Power Current-Impp (A)	6.89	6.95	7.03	7.09	7.16

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

MECHANICAL DATA	
Solar cells	Monocrystalline 156×156 mm
Cell configuration	60 cells (6×10)
Module dimensions	1650×992×40mm
Weight	19kg
Superstrate	3.2 mm, High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Backsheet
Frame	Silver Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	IP67, 1000VDC, SolarEdge smart J-Box
Cables	6.0mm² (10AWG), 1000mm length or above
Connector	IP67 MC4 Compatible

TEMPERATURE & MAXIMUM RATINGS	
Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficient of Voc	-0.32%/°C
Temperature Coefficient (Vlimit)	0.0%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.39%/°C
Operational Temperature	-40~+85°C
Maximum System Voltage	1000VDC
Max Series Fuse Rating	15A

PACKAGING CONFIGURATION		
	40ft	20ft
Number of modules per container	728	312
Number of modules per pallet	26	26
Number of pallets per container	28	12
Packaging box dimensions (LxWxH) in mm	1680×1120×1250	1680×1120×1250
Box gross weight[kg]	560	560

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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