

Harvest the Sunshine

JA SOLAR



www.jasolar.com

Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.



Mono

305W PERC Smart Black Module
JAM60S07 285-305/PR Series

Introduction

JA smart modules incorporate innovative power electronics from SolarEdge to achieve module-level diagnostics, maximum energy harvest through module level DC power optimization, and reduction of arc, fire and safety hazards. Integration of the module optimizer into the junction box enables patented Smart Curve technology, which allows up to 30% longer strings and significant balance-of-system (BOS) savings.

Safer solar

More efficient O&M

Flexible system assembly

Maximized energy Harvest

Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



100%
97%
90%
80%

1 5 10 15 20 25 year

■ JA Linear Power Warranty ■ Industry Warranty

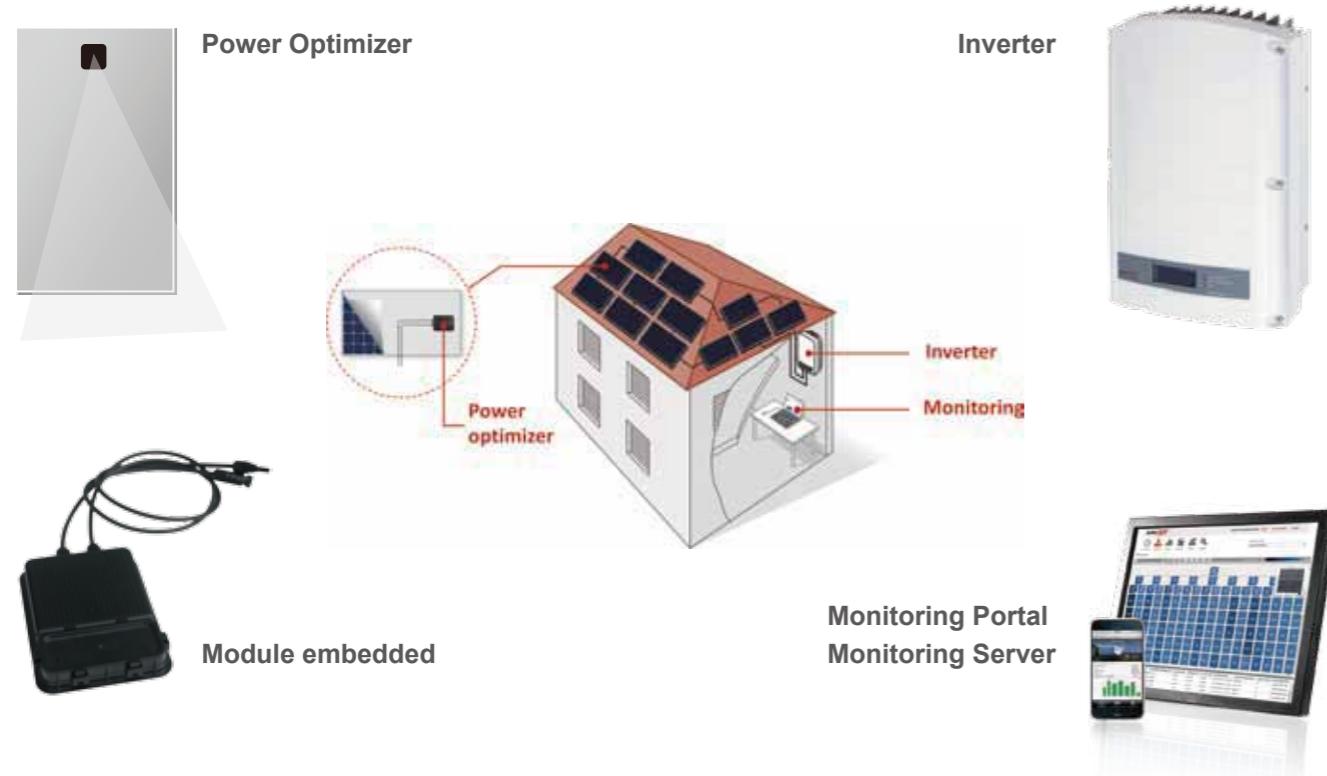
Comprehensive Certificates

- IEC 61215, IEC 61730, IEC TS 62804
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



SYSTEM ARCHITECTURE

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



STRING LENGTHS(computed automatically by SolarEdge Site Designer)

Module Power	285	290	295	300	305
MINIMUM string size with SolarEdge inverter	1ph		8		
	3ph		16		
	3ph-MV		18		
MINIMUM string size with SolarEdge inverter	1ph	18	18	17	17
	3ph	39	38	38	36
	3ph-MV	44	43	43	41
String size with Non-SolarEdge				According to inverter design rules	

OUTPUT VOLTAGES AND CURRENTS

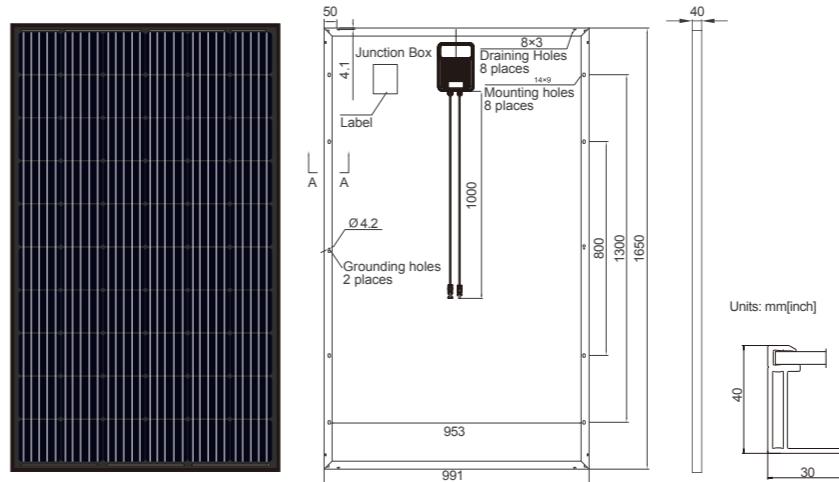
Operating Output Voltage when connected to SolarEdge Inverter	5-60	Vdc
Operating Output Voltage when connected to Non-SolarEdge Inverter	5-Voc of module	Vdc
Maximum Output Current when connected to SolarEdge Inverter	15	Adc
Maximum Output Current when connected to Non-SolarEdge Inverter	10	Adc
Output in Standby mode with SolarEdge inverter or with SMI and Non-SolarEdge inverter (when disconnected from inverter or inverter off)	1	Vdc

STANDARD COMPLIANCE

Fire Safety	VDE-AR-E 2100-712:2013-05
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)

Premium Cells, Premium Modules

MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	18.7kg±3%
Dimensions	1650mm×991mm×40mm
Cable Cross Section Size	6mm ²
No. of cells	60(6x10)
Junction Box	Solar edge smart J-Box
Connector	MC4
Packaging Configuration	27 Per Pallet

ELECTRICAL PARAMETERS AT STC

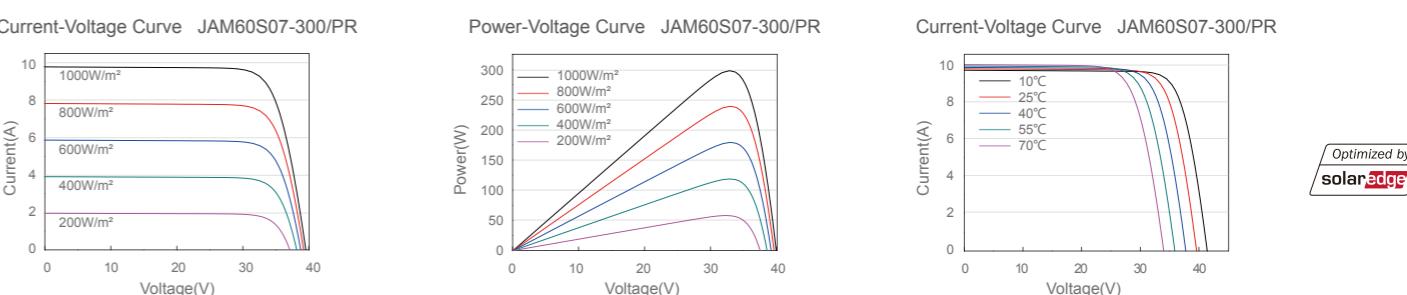
TYPE	JAM60S07 -285/PR	JAM60S07 -290/PR	JAM60S07 -295/PR	JAM60S07 -300/PR	JAM60S07 -305/PR
Rated Maximum Power(Pmax) [W]	285	290	295	300	305
Open Circuit Voltage(Voc) [V]	39.25	39.46	39.64	39.85	40.05
Maximum Power Voltage(Vmp) [V]	31.70	31.80	32.03	32.26	32.57
Short Circuit Current(Isc) [A]	9.46	9.57	9.66	9.75	9.85
Maximum Power Current(Imp) [A]	8.99	9.12	9.21	9.30	9.37
Module Efficiency [%]	17.4	17.7	18.0	18.3	18.7
Power Tolerance	0~+5W				
Temperature Coefficient of Isc(α_{Isc})	+0.060%/°C				
Temperature Coefficient of Voc(β_{Voc})	-0.300%/°C				
Temperature Coefficient of Pmax(γ_{Pmp})	-0.380%/°C				
STC				Irradiance 1000W/m ² , cell temperature 25°C, AM1.5G	

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL PARAMETERS AT NOCT

TYPE	JAM60S07 -285/PR	JAM60S07 -290/PR	JAM60S07 -295/PR	JAM60S07 -300/PR	JAM60S07 -305/PR	Maximum System Voltage	1000V DC(IEC)
Rated Max Power(Pmax) [W]	209	213	217	221	224	Operating Temperature	-40°C~+85°C
Open Circuit Voltage(Voc) [V]	36.11	36.34	36.57	36.75	36.95	Maximum Series Fuse	20A
Max Power Voltage(Vmp) [V]	29.37	29.56	29.63	29.69	29.90	Maximum Static Load,Front	5400Pa
Short Circuit Current(Isc) [A]	7.53	7.61	7.69	7.78	7.86	Maximum Static Load,Back	2400Pa
Max Power Current(Imp) [A]	7.13	7.21	7.32	7.43	7.50	NOCT	45±2°C
NOCT				Irradiance 800W/m ² , ambient temperature 20°C, wind speed 1m/s, AM1.5G		Application Class	Class A

CHARACTERISTICS



Optimized by
solaredge