JA SOLAR

www.jasolar.com

Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.
Shanghai JA Solar Technology Co., Ltd.

Version No. : Global_EN_20200530A

Harvest the Sunshine

Mono

400W PERC Smart Module

JAM72S13 380-400/PR Series

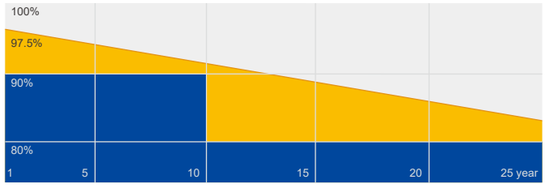
Introduction

JA smart modules incorporate innovative power electronics from Tigo Energy 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



Comprehensive Certificates

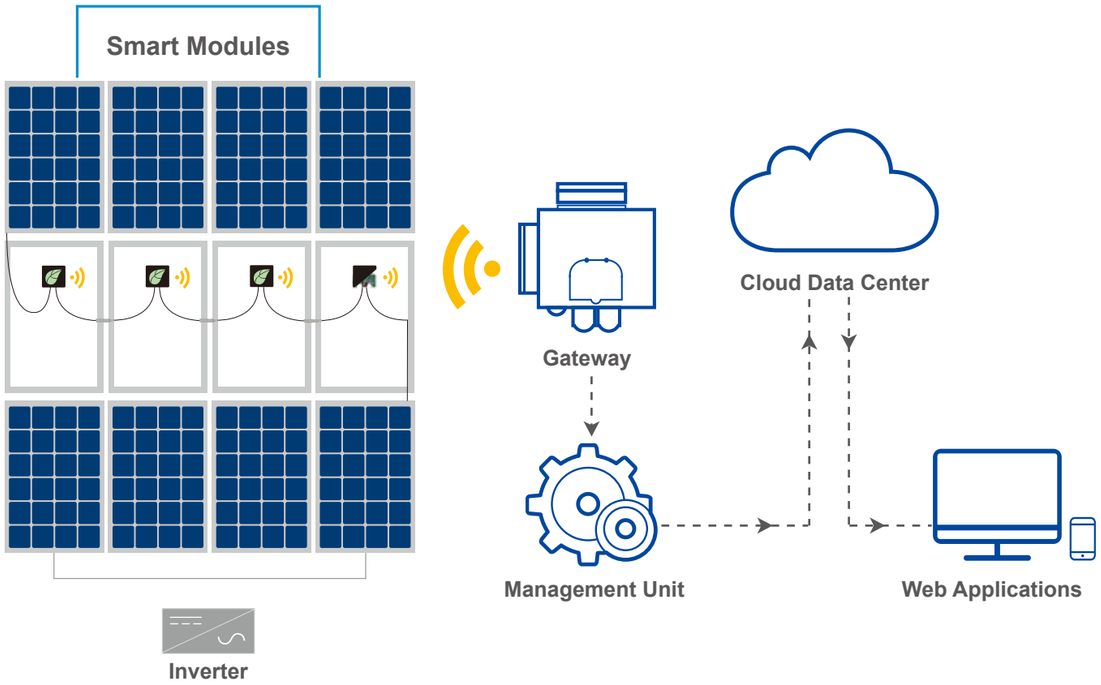
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems

JA SOLAR

www.jasolar.com

SYSTEM ARCHITECTURE

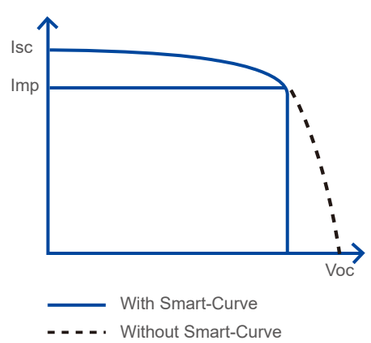
JA smart system components work together with any inverter to maximize energy harvest. JA smart modules communicate wirelessly through the gateway, allowing users to monitor system performance in real time.



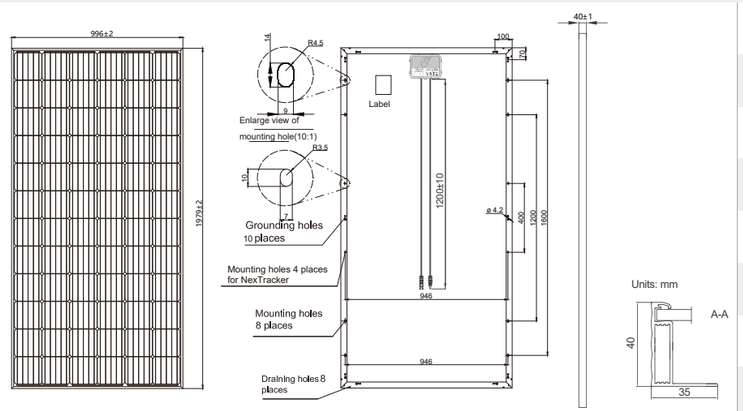
SMART CURVE TECHNOLOGY

Module-integrated smart technology reduces the open circuit voltage range for each module and allows longer strings to be designed. The maximum voltage is programmed by JA Solar in the factory.

- Hardware voltage clamp prevents over-voltage
- Design up to 30% longer strings
- Fewer combiner boxes, fuses and wiring
- Smaller resistance losses



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	22.5kg±3%
Dimensions	1979±2mm×996±2mm×40±1mm
Cable Cross Section Size	4mm²
No. of cells	72(6×12)
Junction Box	Tigo smart J-Box IP67
Connector	Genuine MC4
Country of Manufacturer	China/Vietnam

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S13 -380/PR	JAM72S13 -385/PR	JAM72S13 -390/PR	JAM72S13 -395/PR	JAM72S13 -400/PR
Rated Maximum Power(Pmax) [W]	380	385	390	395	400
Open Circuit Voltage(Voc) [V]	44.71	45.03	45.35	45.63	45.94
Maximum Power Voltage(Vmp) [V]	39.59	39.90	40.21	40.48	40.78
Short Circuit Current(Isc) [A]	10.12	10.17	10.22	10.27	10.33
Maximum Power Current(Imp) [A]	9.60	9.65	9.70	9.76	9.81
Module Efficiency [%]	19.3	19.5	19.8	20.0	20.3
Power Tolerance	0~+5W				
Temperature Coefficient of Isc(α_Isc)	+0.060%/℃				
Temperature Coefficient of Voc(β_Voc)	0/℃				
Temperature Coefficient of Pmax(γ_Pmp)	-0.370%/℃				
STC	Irradiance 1000W/m², cell temperature 25℃, 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.
Measurement tolerance at STC: Pmax ±3 %, Voc ±2% and Isc ±4%.

ELECTRICAL PARAMETERS AT NOCT

TYPE	JAM72S13 -380/PR	JAM72S13 -385/PR	JAM72S13 -390/PR	JAM72S13 -395/PR	JAM72S13 -400/PR
Rated Max Power(Pmax) [W]	281	285	289	292	296
Open Circuit Voltage(Voc) [V]	42.05	42.35	42.65	42.94	43.23
Max Power Voltage(Vmp) [V]	37.34	37.64	37.92	38.21	38.49
Short Circuit Current(Isc) [A]	7.99	8.03	8.07	8.11	8.15
Max Power Current(Imp) [A]	7.53	7.57	7.61	7.65	7.69
NOCT	Irradiance 800W/m², ambient temperature 20℃, wind speed 1m/s, AM1.5G				

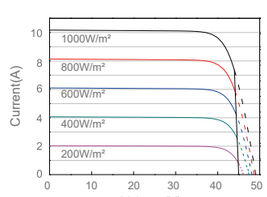
*For NexTracker installations static loading performance: front load measures 2400Pa, while back load measures 2400Pa.

OPERATING CONDITIONS

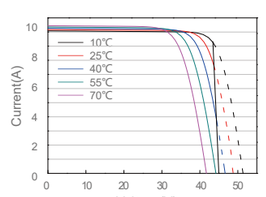
Maximum System Voltage	1000V DC(IEC)
Operating Temperature	-40℃~+85℃
Maximum Series Fuse	20A
Maximum Static Load,Front	3600Pa, 1.5
Maximum Static Load,Back	1600Pa, 1.5
NOCT	45±2℃
Application Class	Class A

CHARACTERISTICS

Current-Voltage Curve JAM72S13-385/PR



Current-Voltage Curve JAM72S13-385/PR



PV 2.0

Optimized by Tigo energy