

# Smart Module 255-315 Watt

POWER OUTPUT RANGE

Positive power tolerance of 0/+3%

JinkoSolar introduces a brand new line of highly intelligent modules for a wide range of applications.



# Optimized by





# **KEY FEATURES**



Built-in intelligent cell optimizer IC avoids negative consequences of any type of mismatch within a panel caused by shading, soling, aging, unfavorable house orientation, etc. to ensure greatest power output possible.



The most flexible solution for any rooftop condition and orientation.



Elimination of hot spots, which results in minimized panel degradation.



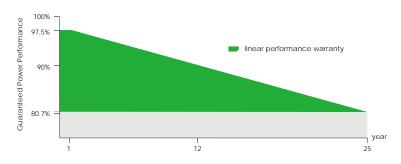
Best-in-class shade tolerance by performing MPPT on individual cell-strings to maximize energy harvest.



Ideal for rooftop and solar power plant applications.

# LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty



## **Smart Module**

Innovations in the photovoltaic industry over the past decades have made PV technology a viable solution for widespread adoption. However, several issues prevent today's standard solar installations from functioning as ideal power sources. Solar modules that are expected to be exposed to the environment for at least 25 years can be affected by conditions such as; shading, soiling, aging, temperature gradients, and more. Mismatch caused by these factors in a panel or among various panels can cause the system to lose power. JinkoSolar Smart Module solutions solves these problems and produce in up to 20% more energy under these unfavorable conditions.

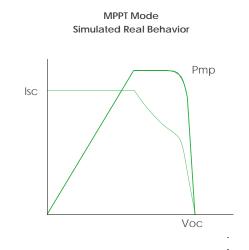
# **Answer for Residential**

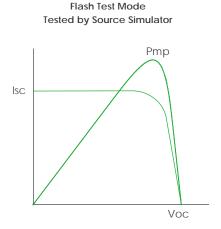
With JinkoSolar Smart Module solution, your solar array will produce the most energy possible regardless of your home orientation or shading issues. Because of the way solar panels are connected and managed in a traditional installation, a weak panel will have a large negative effect on the entire system. Uneven panel aging, slightly different module orientation, and module temperature differences can all lead to lower than expected power output. JinkoSolar Smart Module eliminates these issues by using embedded intelligent cell optimizer and panel optimizer ICs. Any underperforming cell or module can continue to contribute its power to the string, but will not restrict the others. Also it can eliminate hot spot phenomenon, which is the major mechanism causing panel degradation and failure.

# **Smart Module Behavior**

MPPT Mode: JinkoSolar Smart Module isolates cells within the module and arbitrarily scales up the output current to match the string current, hence allowing each cell group to independently operate at its unique Maximum Power Point.

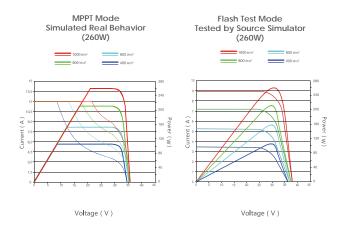
Flash Test Mode: A flash test sweep is performed at a faster rate than the MPPT response time. This allows the module to revert to Active Bypass mode and results in an I-V curve that is comparable to a conventional, non optimized, curve.





# **Engineering Drawings**

# **Electrical Performance**



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2	5.5 9	\$ 35 AA

# **Packaging Configuration**

(Two boxes=One pallet )

25pcs/ box, 50pcs/pallet, 700 pcs/40'HQ Container

Mechanical Characteristics							
Cell Type	Poly-crystalline 156×156mm (6 inch)						
No. of cells	60 (6×10)						
Dimensions	1650×992×40mm (65.00×39.05×1.57 inch)						
Weight	18.5 kg (40.8 lbs)						
Front Glass	3.2mm, High Transmission, Low Iron, Tempered Glass						
Frame	Anodized Aluminium Alloy						
Junction Box	IP67 Rated						
Output Cables	TÜV 1×4.0mm², Length:900mm						

SPECIFICATIONS								
Module Type	JKMS	JKMS255P		JKMS260P		JKMS265P		S270P
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	255Wp	190Wp	260Wp	194Wp	265Wp	198Wp	270Wp	202Wp
Maximum Power Voltage (Vmp)	29.3V	26.7V	29.5V	26.9V	29.8V	27.3V	30.1V	27.5V
Maximum Power Current (Imp)	8.72A	7.11A	8.81A	7.20A	8.88A	7.27A	8.97A	7.34A
Open-circuit Voltage (Voc)	36.1V	33.2V	36.2V	33.3V	36.7V	33.5V	36.9V	33.8V
Short-circuit Current (Isc)	9.39A	7.60A	9.45A	7.64A	9.51A	7.69A	9.57A	7.74A
Module Efficiency STC (%)	15	.58%	15.8	39%	16.1	19%	16.5	50%
Maximum Output Current(Imax)				12	2A			
Operating Temperature(°C)				-40°C~	+85°C			
Maximum system voltage				1000VE	DC(IEC)			
Power tolerance	0~+3%							
Temperature coefficients of Pmax				-0.40	%/°C			
Temperature coefficients of Voc		-0.30%/℃						
Temperature coefficients of lsc		0.06%/℃						
Nominal operating cell temperature (NOCT)				45±	2°C			













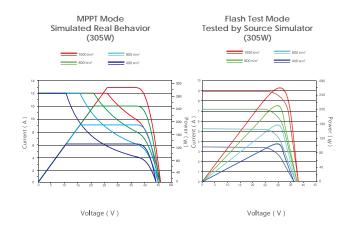


<sup>\*</sup> Power measurement tolerance: ± 3%

# **Engineering Drawings**

# Side Back

# **Electrical Performance**



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2	5.5 9	35
П		A-A

# **Packaging Configuration**

(Two boxes =One pallet)

25pcs/ box, 50pcs/pallet, 550 pcs/40'HQ Container

Mechanica	l Characteristics
Cell Type	Poly-crystalline 156×156mm (6 inch)
No.of cells	72 (6×12)
Dimensions	1956×992×40mm (77.01×39.05×1.57 inch)
Weight	26.5 kg (58.4 lbs.)
Front Glass	4.0mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated
Output Cables	TÜV 1×4.0mm², Length:900mm

SPECIFICATIONS									
Module Type	JKMS300P		JKMS305P		JKMS	JKMS310P		JKMS315P	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax)	300Wp	222Wp	305Wp	226Wp	310Wp	231Wp	315Wp	235Wp	
Maximum Power Voltage (Vmp)	34.8V	31.6V	34.9V	31.9V	35.2V	32.2V	35.3V	32.6V	
Maximum Power Current (Imp)	8.63A	7.02A	8.74A	7.07A	8.82A	7.17A	8.93A	7.20A	
Open-circuit Voltage (Voc)	43.0V	39.5V	43.3V	40.1V	43.6V	40.6V	43.9V	41.0V	
Short-circuit Current (Isc)	9.31A	7.56A	9.38A	7.60A	9.43A	7.64A	9.48A	7.67A	
Module Efficiency STC (%)	15.46%		15.	72%	15.	98%	16.2	23%	
Maximum Output Current(Imax)				1	12A				
Operating Temperature(°C)				-40°C	C~+85°C				
Maximum system voltage	1000VDC (IEC)								
Power tolerance	0~+3%								
Temperature coefficients of Pmax	-0.40%/°C								
Temperature coefficients of Voc	-0.30%/℃								
Temperature coefficients of Isc	0.06%/°C								
Nominal operating cell temperature (NOCT)	45±2℃								















<sup>\*</sup> Power measurement tolerance: ± 3%