JinkoMX

Key Benefits

INTRODUCING EAGLE MX WITH NEXT GENERATION SHADE TOLERANCE

JinkoSolar MX: JinkoSolar takes the next step in DC optimization with JinkoSolar Smart Modules that will enable you to maximize the performance of your PV Systems. The Solar Cell Optimizer System-on-Chip solutions embed the MPPT function deeper than ever before, hence you are no longer constrained by the limits of conventional design or panel-level optimization.

JinkoSolar Eagle MX modules increase shading tolerance and afford additional flexibility for module placement in project designs.

JKMS 260-280PP-60-MX

280 W

17,11% Efficiency

JKMS 280-300M-60-MX

295 W

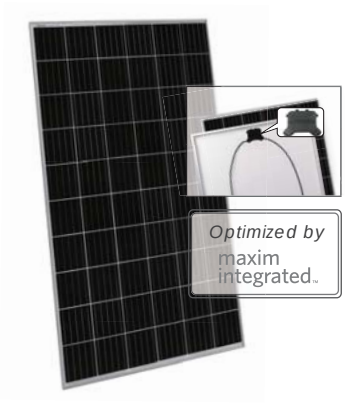
18,02 % Efficiency

JKMS 280-300M-60B-MX

300 W

18,33 % Efficiency

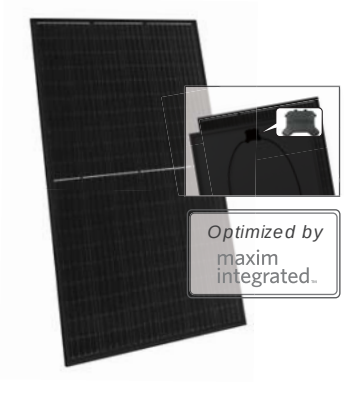
JKMS 300-320M-60-MX



320 W

19,18 % Efficiency

JKMS 315-335M-60H-MX3



335 W

19,85 % Efficiency

Key Benefits of Jinko MX

PERFORMANCE

Module cell string optimization → Higher energy harvest

RELIABILITY

Optimizer instead of bypass diodes → Elimination of Hot-Spots

FLEXIBILITY

Increased string length, flexible tilts and orientations → Easier design and maximized use of space

SIMPLICITY

No additional components or cabling for communication → Compatibility with all main inverters and monitoring systems

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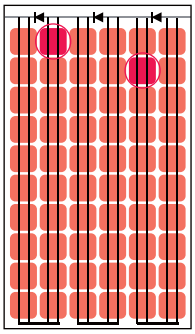
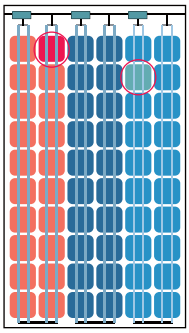
Key Benefits

Benefit: PERFORMANCE

Higher energy harvest: The key advantage of the MX modules is that each module's cell string is optimised, so that a partially shaded module will be less impacted than one with a module level optimiser. Each cell-string (20 cells) has its own MPPT which will always get the best possible energy from that string, compared to a standard module which has bypass diodes that can switch off the entire cell-string, even when only partially shaded.



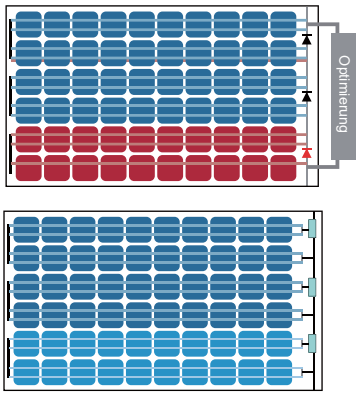
Conventional Module



JinkoMX-Enabled Module

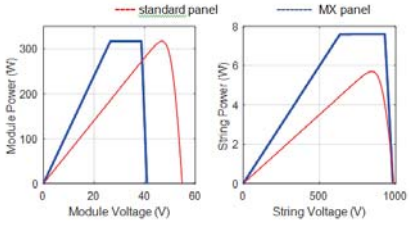
Benefit: RELIABILITY

Elimination of Hot Spots: Optimizer replaces the bypass diodes normally connected to cell strings, eliminating hot spots and associated failure mechanisms. Now the weakest cell only degrades its local cell string, rather than the entire module. Therefore ,Jinko MX modules will continue to generate maximum energy from shaded cell strings, enabling both a higher density and a larger system to be installed in the same roof space.



Benefit: FLEXIBILITY

Flexible string lengths, tilts, and orientations: Use of the new , 2nd generation chip in the Jinko MX modules , with a limited Voc, that enables strings that are 15% longer than the one of conventional modules. When using Jinko MX modules the Voc is limited to a maximum of 35.0V for 60 cell modules, compared to typically 39V for 60 cell modules, which increase with lowering temperatures. It can significantly reduce the BOS costs and enable larger arrays to be designed with specific inverters. This also improves the whole design flexibility by enabling uneven strings, different tilt and multiple orientations within a string.



Design Parameter 72 Cell		Standard	Eagle MX
Min Temp°		-28°C	n/a
Max VOC		54.8V	40.9 V
Panels per String	1000 V	18	24
	1500 V	28	36

72 Cell Modul : 40.9V,
60 Cell Panel : 35 V

Up to 20-35% more panels/string = lower BOS

Benefit: SIMPLICITY

Compatibility with all main inverters and monitoring systems: The Jinko MX modules are installed exactly like standard modules with no extra optimisation hardware, cabling or specialized staff training needed. An important element of initial PV plant cost is related to installation time. Traditional optimiser systems increase hardware, installation steps and system configuration requirements, thus raising costs—substantially so in larger systems. By incorporating modules enabled with solar cell optimisers, a system designer can maximize harvest without raising installation costs.

Gateways, boxes, networking, and issues with inverters are all history.