


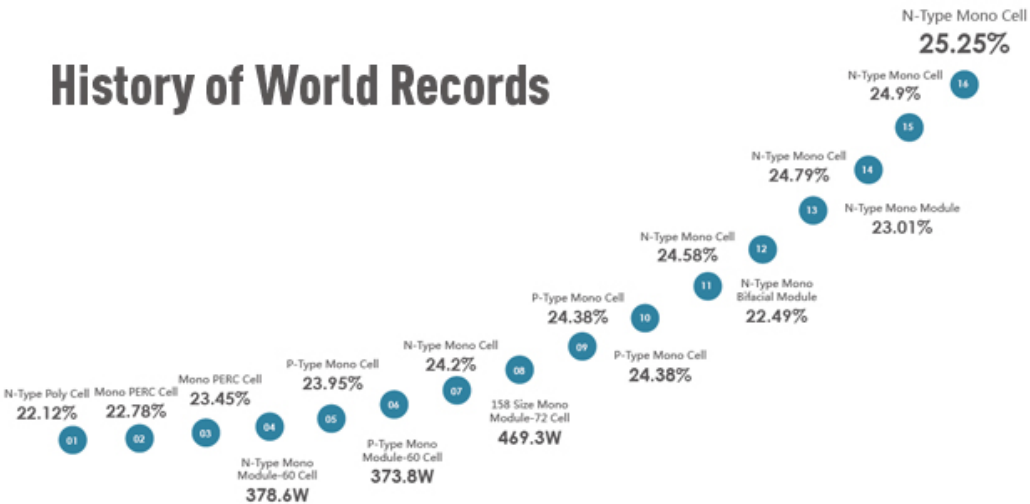
# JinkoSolar Large-Area N-Type Monocrystalline Silicon Solar Cell Reaches Record-breaking New High Efficiency of 25.25%

Tracy Wang (Marketing)

Tue 1/06/2021 12:49



## History of World Records



Record #	Technology	Efficiency (%)	Power (W)
01	N-Type Poly Cell Mono PERC Cell	22.12%	
02	Mono PERC Cell	22.78%	
03	Mono PERC Cell	23.45%	
04	N-Type Mono Module-60 Cell		378.6W
05	P-Type Mono Cell	23.95%	
06	P-Type Mono Module-60 Cell		373.8W
07	N-Type Mono Cell	24.2%	
08	158 Size Mono Module-72 Cell		469.3W
09	P-Type Mono Cell	24.38%	
10	P-Type Mono Cell	24.38%	
11	N-Type Mono Bifacial Module	22.49%	
12	N-Type Mono Cell	24.58%	
13	N-Type Mono Module	23.01%	
14	N-Type Mono Cell	24.79%	
15	N-Type Mono Cell	24.9%	
16	N-Type Mono Cell	25.25%	

### JinkoSolar Large-Area N-Type Monocrystalline Silicon Solar Cell Reaches Record-breaking New High Efficiency of 25.25%

Dear Sir/Madam,

JinkoSolar announced that the maximum solar conversion efficiency of its large-area N-type monocrystalline silicon solar cells reached 25.25%, setting a new world record for large-size contact-passivated solar cells. This result has been independently confirmed by the National Institute of Metrology, China ("NIM"). It is the third time that JinkoSolar has broken this world record since July 2020.

JinkoSolar continues to solidify its reputation in R&D and has made industry-leading iterations in silicon wafers, solar cells and solar modules over the years. Material upgrades integrated into the cell process and fabrication on a practical size of 267.4cm<sup>2</sup> of high quality monocrystalline Czochralski (CZ) silicon substrates allowed the Company to achieve 25.25% cell efficiency. To achieve this extremely high solar cell efficiency using ultra-thin polysilicon, several advanced technologies have been implemented including JinkoSolar's high quality N-type wafer, passivating contact technologies, advanced diffusion system, surface passivation, metallization of crystalline solar cells and other innovative technologies. This major breakthrough has not only increased the solar cell's energy conversion efficiency, but has also paved the way for the Company's mass production of N-type TopCon cells.

Mr. Limin Xiong, Researcher of NIM, commented, "As China's highest research facility of measurement science,

and CNAS Capability Verification provider for solar cells and modules in Electrical Parameter Testing, NIM is committed to providing consistent, accurate and reliable data for scientific and technological progress. At present, it has accounted for 80% market share in third-party calibration services for standard solar cells and innovative solar cells (including perovskite cells). China aims to reach carbon emissions peak before 2030 and achieve carbon neutrality by 2060, so the PV industry has been gearing up for even faster growth with LCOE and solar cell efficiency being the most important factors. I am glad to witness this new world record, and our teams will continue to cooperate and contribute to the industry through R&D.”

Dr. Hao Jin, Chief Technology Officer of JinkoSolar Co., Ltd., commented, “We are very proud to have set three world records for the most advanced large-area N-type cell in the world in less than one year. Maximum cell conversion efficiency improved from 24.79%, to 24.9%, and now to 25.25%, with the latest breakthrough acknowledged by NIM. Each milestone has been a global recognition of our world-class R&D capabilities for which I’m very grateful to our talented R&D team. All the R&D we have invested in has been to further our goals of improving cell and module efficiency and lowering costs. As an industry leader with multiple awards, we are committed to promoting a carbon neutral future based on technology upgrades that will accelerate mass production of competitive industrial products, and provide global customers with more efficient, reliable and clean products.”

Jinko Solar Co.,Ltd.

[www.jinkosolar.com](http://www.jinkosolar.com) | [sales@jinkosolar.com](mailto:sales@jinkosolar.com)