# Chongqing Jiangjin Field Test: JinkoSolar's Tiger Neo 3.0 Achieves Up to 7.55% Yield Gain Compared to N-Type BC Modules

·**Higher Total Power Genera on:** During the tes ng period, the Tiger Neo 3.0 achieved a consistent increase in power output per wa comi l 'Y Ş ɒ opera ng condi ons and to explore its prac cal applica on value in typical commercial and industrial roo op scenarios in the southwestern region, JinkoSolar conducted a compara ve field test of Tiger Neo 3.0 and N-type BC modules in Jiangjin, Chongqing.

Chongqing experiences frequent cloudy weather, with a high propor on of periods of low irradiance, making it a typical region for tes ng modules' low-light response capabili es. At the same me, with the rapid development of distributed PV in the region, industrial plant roofs have become a key applica on scenario. Therefore, this - _ npe ή s e ή Ŀ . comme p and ind trial roo ש ca ב ol utgon ra ב ø & ia

**Per Watt Generation Comparison(kWh/kW)**

**2.Superior Low-Light Performance:** Performance analysis by me segment shows that the Tiger Neo 3.0 modules demonstrate par cularly strong advantages during low-light periods—with a per-wa gain of before 7:00 , allowing them to enter e ec ve power genera on mode earlier; and a per-wa gain of a er 16:00 , e ec vely extending the dura on of power genera on in the evening; The average gain across all me periods throughout the day (9:00 to 15:00) remains above , demonstra ng consistent performance stability around the clock. From a technical perspec ve, the Tiger Neo 3.0 maintains higher current collec on e ciency in low-light environments thanks to its low leakage current characteris cs; By contrast, N-type BC modules, due to the complex interlaced electrode structure on their rear side and dense current leakage pathways, su er significant leakage power losses under low irradiance condi ons, resul ng in limited power genera on.

Tiger Neo 3.0 BC

**Per Watt Generation Comparison(hour)**

Tiger Neo 3.0 BC Generation Gain

**3.Significant Advantage in Low Opera ng Temperature:** The Tiger Neo 3.0 modules demonstrate a clear advantage in opera ng temperature. Throughout the en re test cycle, the average opera ng temperature was **1.27° C** lower than that of compe tor products with the same power output; during the midday period from 12:00 to 13:00 , the average opera ng temperature was **2.7° C** lower than that of compe ng products with the same power output. Lower opera ng temperatures help mi gate power losses caused by the temperature coe cient, further enhancing power genera on performance.

## Data Insights

Actual measurement data from the nearly three-month monitoring period shows that during the test period, the cumula ve power genera on per wa of JinkoSolar's Tiger Neo 3.0 modules reached , while N-type BC modules of the same power ra ng achieved . The Tiger Neo 3.0 achieved a stable power genera on gain per wa of . In Jiangjin, Chongqing, overcast and rainy weather accounted for nearly 80% of the me, the Tiger Neo 3.0 modules' low-light performance can be verified from the following two perspec ves.

**1.Outstanding power genera on performance in the morning and evening:** A me-segmented analysis shows that the Tiger Neo 3.0 performs par cularly well during low-light periods. Before 7:00 , it achieves a per-wa gain of , entering e ec ve power genera on mode earlier; a er 16:00 , it achieves a per-wa gain of , e ec vely extending the evening power genera on dura on; The average gain remained above 1% during the 9:00 –15:00 period, demonstra ng stable performance throughout the day and across all me slots.

**2. Significant advantages throughout the day on cloudy and rainy days:** A single-day analysis of the rainy weather on June 6 showed that the Tiger Neo 3.0 achieved a power genera on gain per wa of on that day. Specifically, the average power genera on gain from 9:00 to 15:00 was , demonstra ng stable performance even when irradiance was generally low throughout the day. Compared to the 2.29% average gain recorded on July 19 under sunny condi ons, the Tiger Neo 3.0's performance advantage in overcast and rainy weather is par cularly pronounced.

## Technical Analysis

From a technical perspec ve, the Tiger Neo 3.0' s performance advantage during low-light condi ons is primarily due to lower internal current losses. As irradiance decreases, the photogenerated current produced by the module decreases accordingly, while the η μæpor oD of Ŀeakage current and parallel resistance lossl l eakl condi Ŀ ש = ea Ŀ u Ŀ ł ol ò ɐaow ή ή r top M co l d Ŀ nc resistance. Related electrical losses are more easily amplified under low-irradiance condi ons, thereby a ec ng power output during low-light periods. This is consistent with empirical results showing that Tiger Neo 3.0 achieves a gain of per wa before 7:00 and a gain that expands to a er 16:00.

Tiger Neo 3.0 BC