

## 2.78%! Weihai Rooftop PV Test Results Announced: Jinko Tiger Neo Lead N-type BC in Power Generation Gain

Recently, Jinko Solar carried out a string-wise power generation comparative test on an operational household PV station in the coastal area adjacent to Weihai, Shandong Province. Based on the measured power generation data spanning from August to November 2025, the per-watt power generation output of Jinko Tiger Neo modules demonstrated a statistically significant superiority over that of the co-tested N-type BC modules.

**1. The power generation superiority of Jinko Tiger Neo modules was particularly pronounced under low-irradiance conditions. During the daily low-light periods at 7:00 a.m. and 17:00 p.m., the per-watt power generation of Tiger Neo modules exceeded that of N-type BC modules by 3.13% and 5.53%, respectively. These empirical data fully validate that Jinko Tiger Neo modules exhibit superior operational performance in low-illumination scenarios such as cloudy days, early mornings and late afternoons, enabling stable and elevated energy output and thereby enhancing the overall power generation efficiency of the PV system.**

**2. Validated through a number of empirical studies and offshore PV project trials, Jinko Tiger Neo modules have manifested exceptional environmental adaptability in coastal and offshore settings. Even under harsh operating conditions characterized by high humidity and salt spray corrosion, the modules maintain a high level of power generation efficiency, significantly prolonging the service lifespan of the PV system and providing a reliable product solution for PV projects deployed in coastal regions.**

Benefiting from its excellent high-temperature power generation performance, outstanding low-irradiance power generation capability and high reliability in coastal environments, Jinko Tiger Neo modules achieved a 2.78% average per-watt power generation gain relative to N-type BC modules.



### Project Background

In the current context of rapid technological iteration within the global PV industry, N-type TOPCon technology has emerged as the mainstream installation solution in the market, owing to its high power conversion efficiency and operational stability. Recently, certain PV module manufacturers have publicized the technical merits of their products, with a particular emphasis on the enhancements in rated power and front-side conversion efficiency realized through gridless structural design.

Weihai, located in Shandong Province, is a coastal city endowed with abundant solar irradiance and a typical maritime climate, rendering it an ideal pilot site for evaluating the environmental adaptability of different types of PV modules. This empirical study focused on the practical application scenario of household PV power stations, conducting a comprehensive comparative analysis of the power generation performance between Jinko Tiger Neo modules and N-type BC modules. The preliminary test results indicated that the N-type TOPCon technology integrated into Tiger Neo modules possesses more prominent advantages in terms of power generation output, making it the optimal PV solution for customers in the current market.

### Project Overview

This research was conducted on a household distributed PV system located in Weihai, Shandong Province, with a distance of 2 kilometers from the coastline, thus being directly exposed to the impacts of maritime climate. The test duration covered the period from August to

November 2025. Two categories of PV modules were installed on-site for the comparative test: Jinko Tiger Neo modules (rated power: 635W) and N-type BC modules (rated power: 640W). To ensure the fairness and rigor of the test, both types of modules were configured under identical installation parameters: the modules were oriented due south with an installation tilt angle of 15°; each string was composed of 16 modules; inverters of the same manufacturer and model were adopted; the vertical distance between the modules and the roof surface was approximately 10cm; and there were no shading obstacles at the test site.

In terms of data acquisition, the project was equipped with voltage and current collection devices with a sampling accuracy of Class 0.5, operating at a sampling interval of 1 minute to achieve high-frequency and precise acquisition of power generation data. Meanwhile, key environmental parameters including module surface irradiance, module backsheet temperature, ambient temperature and humidity, atmospheric pressure, wind speed and wind direction were synchronously monitored and recorded at the same 1-minute interval, laying a solid foundation for subsequent comparative analysis of the test data.

### Test Results

During the test period from August to November 2025, the cumulative per-watt power generation of Jinko Tiger Neo modules reached 408.86Wh/W, whereas the cumulative per-watt power generation of N-type BC modules was 397.82Wh/W, corresponding to a **2.78%** power generation gain for Tiger Neo modules. The performance of Tiger Neo modules was particularly outstanding under low-light conditions. According to the data monitored from August 1 to November 12, the per-watt power generation of Tiger Neo modules was **3.13%** higher than that of N-type BC modules at 7:00 a.m., and the power generation gain surged to **5.53%** at 17:00 p.m.

It is noteworthy that due to the objective constraints imposed by the installation scenario and mounting method of this household PV project, the bifacial power generation gain advantage of Jinko Tiger Neo modules was not fully exploited. Even under such suboptimal conditions, the power generation output of Tiger Neo modules still surpassed that of N-type BC modules. Further evidence from empirical projects conducted by other third-party testing institutions confirms that if Tiger Neo modules are applied in ground-mounted PV power stations or high-bracket distributed PV systems where bifacial power generation gain can be fully harnessed, their high bifaciality characteristic will be brought into full play, leading to more significant power generation advantages and thus yielding more substantial power generation revenue for customers.

Month	Jinko Tiger Neo (Wh/W)	N-type BC (Wh/W)	Per Watt Generation
8	141.9941302	138.0588176	2.85%
9	136.689752	132.943969	2.82%
10	84.10660154	81.85912127	2.75%
11	46.07257829	44.95568659	2.48%
Total	408.863062	397.8175945	2.78%

Jinko Tiger Neo VS BC : Per Watt Generation Comparison (Time periods)

