Abstract:

The harvested energy of TOPCon and BC modules has not yet been proved in the field test before. This project aims to present an experimental study on the energy yield performance of the TOPCon PV modules compared to BC modules in the rooftop installation scenario in Laizhou, located near the north east coast of China. The experimental results have proven that the energy yield gain of the TOPCon modules is 1.7% higher compared to BC modules.

Introduction:

To investigate both technologies in outdoor performance, especially in the humid rooftop field environment, an experimental study on the energy yield performance of TOPCon PV modules in comparison to BC modules was carried out in Laizhou, Shandong Province, China.

15 pieces of Jinkosolar' s TOPCon modules rated 585Watt and 15 pieces of BC modules also rated 585Watt were installed in a residential rooftop with a tilt angle of 20° in Laizhou, 2 kilometer away from Bohai Sea. By this installation, an optimum for the use of front side power generation was reached as shown in Figure 1.