Case Study: Quickly Identifying System Problems

Kasaoka, Japan

Location: Kasaoka, Japan (岡山県 笠岡市)
System Size: 50 kW
Owner: Nitto Kogyo K.K.
Mr. Kuniya Kakuda, CEO

The Challenge

System problems, such as failed diodes, cause significant energy loss. Without module-level monitoring, many system problems go unnoticed for long periods of time. A diode failure causes a module’s performance to drop by 1/3 instantly. In two different instances, modules within this array experienced a sudden drop of power.

The Solution

Tigo Energy’s module-level monitoring allows installers, systems owners and support personnel to identify system problems the minute they happen. Tigo Energy provides the data needed to identify and fix defective components.

The Results—¥140,000 saved

Using precise module-level data, Tigo Energy’s support team identified two different drops in power on different dates in two different modules. On January 23, at 12:19 the power production of panel Q9 dropped by 1/3. On March 10 at 9:16 module B5 experienced a similar drop. With Tigo Energy, the problem could be identified and analyzed the minute it occurred. The drop in voltage was diagnosed as a failed diode in each module. Replacing these two diodes alone saves the customer approximately 140,000 yen over 20 years.

Customer Testimony

"I could not recognize this issue without the Tigo system and support. It makes me very happy, and I am willing to be a facilitator for Tigo Energy."

"タイゴエナジーがなければ、わからない事であり、導入したことにより大変満足しております。そして、タイゴエナジーの素晴らしさを伝えていると思っております。"

Mr. Kuniya Kakuda, CEO
Nitto Kogyo K.K.