

Case Study: Carport, Japan



23% More Energy due to Shade Mitigation

Location: Anjo, Japan (安城市、愛知県)

System Size: 9.72 kW (タイゴ後付け事例)

Summary (電柱による日影の影響をミニマイズ)

This installation has to cope with substantial shade during the day due to electricity poles in front of the building. Tigo optimizers mitigate the mismatch and allow each module to produce its maximum power, without disturbing the rest of the PV modules.

The Challenge (ストリングの電流電圧をバランス)

With greater than 35% mismatch between modules, the optimizers must balance the current within each of the strings as well as the voltage between strings. Without Tigo, under these conditions, many shaded modules would be completely bypassed or strong modules would be drastically underperforming.

The Solution (インピーダンスマッチング技術)

Tigo Energy's patented Impedance Matching technology enables each module to produce its maximum power, without affecting adjacent modules in the string.

Result (23%の出力改善の実証)

After two months of operating with Optimizers, the system is performing in average 23% better than it did during the equivalent months in 2011 and 2012.

