

Application Note: Determining Power Optimizer and PV Module Compatibility based on Isc STC

As of May 2020, compatibility between power optimizers and PV modules is determined based on the Isc STC value, instead of the Isc temperature coefficient of the module.

This ensures that a greater range of power optimizers are compatible with various PV modules.

In the example below, the PV module's Isc Max Achieved value is 11.18 A (calculated based on the Isc temperature coefficient of 0.057%). This prevents the use of the P370 power optimizers, which have the maximum Isc of 11, with this particular PV module.

However, when the compatibility criterion is changed to Isc STC (10.93 A), the use of the P370 power optimizers becomes possible.

MODULE DATASHEET

Manufacturer		
Model		
Electrical Data	STC	Max Achieved
Peak Power (Pmax)	345 W	345 W
Voc	40.3 V	43.38 V
Isc	10.93 A	11.18 A
Vmpp	33.1 V	
Impp	10.43 A	
Min/Max Power Tolerance	0/1.45 %	
Temp. Coeff. of Pmax	-0.37 %	
Temp. Coeff. of Voc	-0.286 %	
Temp. Coeff. of Isc	0.057 %	