

i12 String Optimizer

600V Systems

maximum output **12A**

Vxxx-i12-12 Models		V425	V570	V600
Electrical				
Input				
Maximum voltage per input ¹	V	585	585	585
Maximum current per input ²	A	11	11	11
Maximum short-circuit current (Isc) per input	A	12	12	12
MPP tracking voltage range	V	200 - 460	200 - 460	200 - 460
Startup voltage per input	V	210	210	210
Number of inputs		2	2	2
Output				
Output voltage range	V	0 - 425	0 - 570	0 - 600
Output voltage at full power	V	405	535	580
Output voltage at zero power	V	425	570	600
Maximum output current	A	12	12	12
Maximum continuous output power	kWdc	4.7	6.3	6.8
Efficiency (max / CEC / Euro)	%		99.4 / 99.1 / 99.0	
Mechanical				
Input & output connector			Amphenol H4	
Dimensions			10.19" x 8.66" x 3.15" (259 mm x 220 mm x 80 mm)	
Weight			7.4 lbs. (3.4 kg)	
Ambient temperature operating range			-40 °F to +122 °F (-40 °C to +50 °C)	
Cooling			Convection	
Environmental				
Environmental category			Outdoor	
Pollution degree			2	
Maximum operating altitude ³			9843 ft (3000 m)	
Overvoltage category			OVII	
Ingress protection			IP66 / 4X	
General				
Compliance			ETL to UL 1741; IEC 61000-6-1, 61000-6-3, 62109; CE; Giteki 2-1-19; FCC Part 15, class A	

1. Voc at coldest design temp. Follow Ampt's design guidelines to determine the number of modules per input and max. system voltage.
2. Maximum Imp of modules on the input at standard test condition (STC) - irradiation level of 1000 W/m² at 25°C.
3. Optimizer derates above this altitude.