

# i13.5 String Optimizer

## 600V Systems

maximum output **13.5A**

Vxxx-i13.5-13.5 Models		V550	V575	V600
<b>Electrical</b>				
<b>Input</b>				
Maximum voltage per input <sup>1</sup>	V	600	600	600
Maximum current (Imp) per input <sup>2</sup>	A	12.8	12.8	12.8
Maximum short-circuit current (Isc) per input	A	13.5	13.5	13.5
MPP tracking voltage range	V	190 - 585	190 - 585	190 - 585
Startup voltage per input	V	400	400	400
Number of inputs		2	2	2
<b>Output</b>				
Output voltage range	V	0 - 550	0 - 575	0 - 600
Output voltage at full power	V	460	485	510
Output voltage at zero power	V	550	575	600
Maximum output current	A	13.5	13.5	13.5
Maximum continuous output power	kWdc	6.0	6.4	6.7
Efficiency (max / CEC / Euro)	%		99.5 / 99.3 / 99.2	
<b>Mechanical</b>				
Input & output connector		Amphenol H4		
Dimensions		10.71" x 8.66" x 3.94" (272 mm x 220 mm x 100 mm)		
Weight		9.0 lbs. (4.1 kg)		
Ambient temperature operating range		-40 °F to +122 °F (-40 °C to +50 °C)		
Cooling		Convection		
<b>Environmental</b>				
Environmental category		Outdoor		
Pollution degree		2		
Maximum operating altitude <sup>3</sup>		9843 ft (3000 m)		
Overvoltage category		OVII		
Ingress protection		IP66 / 4X		
<b>General</b>				
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/m<sup>2</sup> at 25°C.
3. Optimizer derates above this altitude.

# i13.5 String Optimizer

## 600V Systems

maximum output **12.8A**

Vxxx-i13.5-12.8 Models		V550	V575	V600
<b>Electrical</b>				
<b>Input</b>				
Maximum voltage per input <sup>1</sup>	V	600	600	600
Maximum current (Imp) per input <sup>2</sup>	A	12.8	12.8	12.8
Maximum short-circuit current (Isc) per input	A	13.5	13.5	13.5
MPP tracking voltage range	V	190 - 585	190 - 585	190 - 585
Startup voltage per input	V	400	400	400
Number of inputs		2	2	2
<b>Output</b>				
Output voltage range	V	0 - 550	0 - 575	0 - 600
Output voltage at full power	V	465	490	515
Output voltage at zero power	V	550	575	600
Maximum output current	A	12.8	12.8	12.8
Maximum continuous output power	kWdc	5.8	6.1	6.4
Efficiency (max / CEC / Euro)	%		99.5 / 99.3 / 99.2	
<b>Mechanical</b>				
Input & output connector		Amphenol H4		
Dimensions		10.71" x 8.66" x 3.94" (272 mm x 220 mm x 100 mm)		
Weight		9.0 lbs. (4.1 kg)		
Ambient temperature operating range		-40 °F to +122 °F (-40 °C to +50 °C)		
Cooling		Convection		
<b>Environmental</b>				
Environmental category		Outdoor		
Pollution degree		2		
Maximum operating altitude <sup>3</sup>		9843 ft (3000 m)		
Overvoltage category		OVII		
Ingress protection		IP66 / 4X		
<b>General</b>				
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/m<sup>2</sup> at 25°C.
3. Optimizer derates above this altitude.