

# i13.5 String Optimizer

## 1000V Systems

maximum output **13.5A**

Vxxx-i13.5-13.5 models		V850	V875	V900	V925	V950	V975	V1000
<b>Electrical</b>								
<b>Input</b>								
Maximum voltage per input	V	1000	1000	1000	1000	1000	1000	1000
Maximum current (Imp) per input	A	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Maximum short-circuit current (Isc) per input	A	13.5	13.5	13.5	13.5	13.5	13.5	13.5
MPP tracking voltage range	V	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900
Startup voltage per input	V	400	400	400	400	400	400	400
Number of inputs		2	2	2	2	2	2	2
<b>Output</b>								
Output voltage range	V	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Maximum output voltage at full power	V	760	785	810	835	860	885	910
Output voltage at zero power	V	850	875	900	925	950	975	1000
Maximum output current	A	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Maximum continuous output power	kWdc	10.2	10.5	10.9	11.2	11.5	11.9	12.2
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 – 122 °F (-40 °C – 50 °C)							
Cooling	Convection							
<b>Environmental</b>								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

Follow Ampt design guidelines to identify possible derating at high ambient temperatures or altitudes.

# i13.5 String Optimizer

## 1000V Systems

maximum output **12.8A**

Vxxx-i13.5-12.8 models		V850	V875	V900	V925	V950	V975	V1000
<b>Electrical</b>								
<b>Input</b>								
Maximum voltage per input	V	1000	1000	1000	1000	1000	1000	1000
Maximum current (Imp) per input	A	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Maximum short-circuit current (Isc) per input	A	13.5	13.5	13.5	13.5	13.5	13.5	13.5
MPP tracking voltage range	V	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900
Startup voltage per input	V	400	400	400	400	400	400	400
Number of inputs		2	2	2	2	2	2	2
<b>Output</b>								
Output voltage range	V	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Maximum output voltage at full power	V	765	790	815	840	865	890	915
Output voltage at zero power	V	850	875	900	925	950	975	1000
Maximum output current	A	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Maximum continuous output power	kWdc	9.7	10.0	10.3	10.7	11.0	11.3	11.6
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 – 122 °F (-40 °C – 50 °C)							
Cooling	Convection							
<b>Environmental</b>								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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# i13.5 String Optimizer

## 1000V Systems

maximum output **12A**

Vxxx-i13.5-12 models		V850	V875	V900	V925	V950	V975	V1000
<b>Electrical</b>								
<b>Input</b>								
Maximum voltage per input	V	1000	1000	1000	1000	1000	1000	1000
Maximum current (Imp) per input	A	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Maximum short-circuit current (Isc) per input	A	13	13	13	13	13	13	13
MPP tracking voltage range	V	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900	190 – 900
Startup voltage per input	V	400	400	400	400	400	400	400
Number of inputs		2	2	2	2	2	2	2
<b>Output</b>								
Output voltage range	V	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Maximum output voltage at full power	V	770	795	820	845	870	895	920
Output voltage at zero power	V	850	875	900	925	950	975	1000
Maximum output current	A	12	12	12	12	12	12	12
Maximum continuous output power	kWdc	9.2	9.5	9.8	10.1	10.4	10.7	11.0
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 – 122 °F (-40 °C – 50 °C)							
Cooling	Convection							
<b>Environmental</b>								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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