

# String Optimizer

# V1500 Series - 20 A Models

Model		V1250-20	V1300-20	V1325-20	V1350-20	V1400-20	V1450-20	V1475-20
<b>Electrical</b>								
<b>Input</b>								
Maximum voltage per input <sup>1</sup>	V	1500	1500	1500	1500	1500	1500	1500
Maximum current per input <sup>2</sup>	A	12.8	12.8	12.8	12.8	12.8	12.8	12.8
MPP tracking voltage range	V	400-1300	400-1300	400-1300	400-1300	400-1300	400-1300	400-1300
Startup voltage per input	V	510	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2	2
<b>Output</b>								
Voltage range	V	0-1250	0-1300	0-1325	0-1350	0-1400	0-1450	0-1475
Maximum current	A	20	20	20	20	20	20	20
Max continuous power	kWdc	22.8	23.8	24.3	24.8	25.8	26.7	27.2
Efficiency (Max / CEC / Euro)	%	99.6 / 99.5 / 99.4						
<b>Mechanical</b>								
Input and output connector type	Amphenol H4							
Dimensions	13.31" x 8.66" x 3.94" (338mm x 220mm x 100mm)							
Weight	11.6 lbs. (5.3 kg)							
Ambient temperature operating range	-40 °F to +167 °F (-40 °C to +75 °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	IP 66 / 4X							
<b>General</b>								
Maximum system voltage	1500 V							
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 temperature - follow Ampt's design guidelines to determine the number of modules per input and maximum system voltage.

2. Module Imp at standard test condition (STC) - irradiation level of 1000 W/m<sup>2</sup> at 25°C.

3. Optimizer derates above this altitude.

# String Optimizer

# V1500 Series - 16 A Models

Model		V1250-16	V1300-16	V1325-16	V1350-16	V1400-16	V1450-16	V1475-16
<b>Electrical</b>								
<b>Input</b>								
Maximum voltage per input <sup>1</sup>	V	1500	1500	1500	1500	1500	1500	1500
Maximum current per input <sup>2</sup>	A	12.3	12.3	12.3	12.3	12.3	12.3	12.3
MPP tracking voltage range	V	400-1300	400-1300	400-1300	400-1300	400-1300	400-1300	400-1300
Startup voltage per input	V	510	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2	2
<b>Output</b>								
Voltage range	V	0-1250	0-1300	0-1325	0-1350	0-1400	0-1450	0-1475
Maximum current	A	16	16	16	16	16	16	16
Max continuous power	kWdc	18.5	19.3	19.7	20.1	20.9	21.6	22.0
Efficiency (Max / CEC / Euro)	%	99.6 / 99.5 / 99.4						
<b>Mechanical</b>								
Input and output connector type	Amphenol H4							
Dimensions	13.31" x 8.66" x 3.94" (338mm x 220mm x 100mm)							
Weight	11.6 lbs. (5.3 kg)							
Ambient temperature operating range	-40 °F to +167 °F (-40 °C to +75 °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	IP 66 / 4X							
<b>General</b>								
Maximum system voltage	1500 V							
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 temperature - follow Ampt's design guidelines to determine the number of modules per input and maximum system voltage.

2. Module Imp at standard test condition (STC) - irradiation level of 1000 W/m<sup>2</sup> at 25°C.

3. Optimizer derates above this altitude.

# String Optimizer

# V1500 Series - 12 A Models

Model		V1325-12	V1350-12	V1400-12	V1450-12	V1475-12
<b>Electrical</b>						
<b>Input</b>						
Maximum voltage per input <sup>1</sup>	V	1500	1500	1500	1500	1500
Maximum current per input <sup>2</sup>	A	12.3	12.3	12.3	12.3	12.3
MPP tracking voltage range	V	400-1300	400-1300	400-1300	400-1300	400-1300
Startup voltage per input	V	510	510	510	510	510
Number of inputs		2	2	2	2	2
<b>Output</b>						
Voltage range	V	0-1325	0-1350	0-1400	0-1450	0-1475
Maximum current	A	12	12	12	12	12
Max continuous power	kWdc	14.9	15.2	15.8	16.4	16.7
Efficiency (Max / CEC / Euro)	%	99.6 / 99.5 / 99.4				
<b>Mechanical</b>						
Input and output connector type	Amphenol H4					
Dimensions	13.31" x 8.66" x 3.94" (338mm x 220mm x 100mm)					
Weight	11.6 lbs. (5.3 kg)					
Ambient temperature operating range	-40 °F to +167 °F (-40 °C to +75 °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	IP 66 / 4X					
<b>General</b>						
Maximum system voltage	1500 V					
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 temperature - follow Ampt's design guidelines to determine the number of modules per input and maximum system voltage.

2. Module Imp at standard test condition (STC) - irradiation level of 1000 W/m<sup>2</sup> at 25°C.

3. Optimizer derates above this altitude.