

String Optimizer

V1500-20-16 Series

Vxxx-20-16 Models		V1375	V1400	V1425	V1450	V1475	V1500
Electrical							
Input							
Maximum voltage per input ¹	V	1500	1500	1500	1500	1500	1500
Maximum current per input ²	A	12.3	12.3	12.3	12.3	12.3	12.3
Maximum short-circuit current (Isc) per input	A	13.3	13.3	13.3	13.3	13.3	13.3
MPP tracking voltage range	V	400 - 1300	400 - 1300	400 - 1300	400 - 1300	400 - 1300	400 - 1300
Startup voltage per input	V	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Output voltage at full power	V	1310	1335	1360	1385	1410	1435
Output voltage at zero power	V	1375	1400	1425	1450	1475	1500
Maximum output current	A	16	16	16	16	16	16
Maximum continuous output power	kWdc	20.5	20.9	21.3	21.6	22.0	22.4
Efficiency (max, CEC, Euro)	%	99.6 / 99.5 / 99.4					
Mechanical							
Input & output connector	Amphenol H4						
Dimensions	13.31" x 8.66" x 3.94" (338 mm x 220 mm x 100 mm)						
Weight	11.6 lbs. (5.3 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							
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 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.

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Vxxx-20-16 Models		V1200	V1225	V1250	V1275	V1300	V1325	V1350
Electrical								
Input								
Maximum voltage per input ¹	V	1500	1500	1500	1500	1500	1500	1500
Maximum current per input ²	A	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Maximum short-circuit current (Isc) per input	A	13.3	13.3	13.3	13.3	13.3	13.3	13.3
MPP tracking voltage range	V	400 - 1135	400 - 1160	400 - 1185	400 - 1210	400 - 1235	400 - 1260	400 - 1285
Startup voltage per input	V	510	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325	0 - 1350
Output voltage at full power	V	1135	1160	1185	1210	1235	1260	1285
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325	1350
Maximum output current	A	16	16	16	16	16	16	16
Maximum continuous output power	kWdc	17.7	18.1	18.5	18.9	19.3	19.7	20.1
Efficiency (max, CEC, Euro)	%	99.6 / 99.5 / 99.4						
Mechanical								
Input & output connector	Amphenol H4							
Dimensions	13.31" x 8.66" x 3.94" (338 mm x 220 mm x 100 mm)							
Weight	11.6 lbs. (5.3 kg)							
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General								
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							

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