

i20 String Optimizer

1000V Systems

maximum output **20A**

Vxxxx-i20-20 Models		V800	V825	V850	V875	V900	V925	V950	V975	V1000
Electrical										
Input										
Maximum voltage per input ¹	V	1000	1000	1000	1000	1000	1000	1000	1000	1000
Maximum current (Imp) per input ²	A	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Maximum short-circuit current (Isc) per input	A	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
MPP tracking voltage range	V	400 - 720	400 - 745	400 - 770	400 - 795	400 - 820	400 - 845	400 - 870	400 - 895	400 - 920
Startup voltage per input	V	510	510	510	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2	2	2	2
Output										
Output voltage range	V	0 - 800	0 - 825	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Output voltage at full power	V	720	745	770	795	820	845	870	895	920
Output voltage at zero power	V	800	825	850	875	900	925	950	975	1000
Maximum output current	A	20	20	20	20	20	20	20	20	20
Maximum continuous output power	kWdc	14.0	14.5	15.0	15.5	16.0	16.5	16.9	17.4	17.9
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2								
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										
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.

i20 String Optimizer

1000V Systems

maximum output **16A**

Vxxxx-i20-16 Models		V800	V825	V850	V875	V900	V925	V950	V975	V1000
Electrical										
Input										
Maximum voltage per input ¹	V	1000	1000	1000	1000	1000	1000	1000	1000	1000
Maximum current (Imp) per input ²	A	12.3	12.3	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	13.3	13.3
MPP tracking voltage range	V	400 - 735	400 - 760	400 - 785	400 - 810	400 - 835	400 - 860	400 - 885	400 - 910	400 - 935
Startup voltage per input	V	510	510	510	510	510	510	510	510	510
Number of inputs		2	2	2	2	2	2	2	2	2
Output										
Output voltage range	V	0 - 800	0 - 825	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Output voltage at full power	V	735	760	785	810	835	860	885	910	935
Output voltage at zero power	V	800	825	850	875	900	925	950	975	1000
Maximum output current	A	16	16	16	16	16	16	16	16	16
Maximum continuous output power	kWdc	11.5	11.8	12.2	12.6	13.0	13.4	13.8	14.2	14.6
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2								
Mechanical										
Input & output connector	Amphenol H4									
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Ambient temperature operating range	-40 °F to +122 °F (-40 °C to +50 °C)									
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Pollution degree	2									
Maximum operating altitude ³	9843 ft (3000 m)									
Overvoltage category	OVII									
Ingress protection	IP66 / 4X									
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