

# i20 String Optimizer

## 1000V Systems

maximum output **20A**

Vxxx-i20-20 models		V800	V825	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	1000	1000
Maximum current (Imp) per input	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
<b>Output</b>										
Output voltage range	V	0 - 800	0 - 825	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Maximum 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	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2								
<b>Mechanical</b>										
Input & output connector	Stäubli MC4-Evo 2									
Dimensions	12.13" x 9.45" x 4.26" (308.1 mm x 240 mm x 108.2 mm)									
Weight	11.8 lbs. (5.4 kg)									
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)									
Cooling	Convection									
<b>Environmental</b>										
Environmental category	Outdoor									
Pollution degree	2									
Maximum operating altitude	9843 ft (3000 m)									
Overvoltage category	OVII									
Ingress protection	IP67 / NEMA 6									
<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.

# i20 String Optimizer

## 1000V Systems

maximum output **16A**

Vxxx-i20-16 models		V800	V825	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	1000	1000
Maximum current (Imp) per input	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
<b>Output</b>										
Output voltage range	V	0 - 800	0 - 825	0 - 850	0 - 875	0 - 900	0 - 925	0 - 950	0 - 975	0 - 1000
Maximum 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	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5	14.9
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2								
<b>Mechanical</b>										
Input & output connector	Stäubli MC4-Evo 2									
Dimensions	12.13" x 9.45" x 4.26" (308.1 mm x 240 mm x 108.2 mm)									
Weight	11.8 lbs. (5.4 kg)									
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)									
Cooling	Convection									
<b>Environmental</b>										
Environmental category	Outdoor									
Pollution degree	2									
Maximum operating altitude	9843 ft (3000 m)									
Overvoltage category	OVII									
Ingress protection	IP67 / NEMA 6									
<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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