

# i32 String Optimizer

## 600V Systems

maximum output **32A**

Vxxx-i32-32 models		V525	V550	V575	V600
<b>Electrical</b>					
<b>Input</b>					
Maximum voltage per input	V	600	600	600	600
Maximum current (Imp) per input	A	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26
MPP tracking voltage range	V	300 - 445	300 - 470	300 - 495	300 - 520
Startup voltage per input	V	390	390	390	390
Number of inputs		2	2	2	2
<b>Output</b>					
Output voltage range	V	0 - 525	0 - 550	0 - 575	0 - 600
Maximum output voltage at full power	V	445	470	495	520
Output voltage at zero power	V	525	550	575	600
Maximum output current	A	32	32	32	32
Maximum continuous output power	kWdc	14.0	14.8	15.6	16.4
Efficiency (max / CEC / Euro)	%		99.3 / 99.3 / 99.2		
<b>Mechanical</b>					
Input & output connector			Stäubli MC4-Evo 2		
Dimensions			15.85" x 9.45" x 4.26" (402.6 mm x 240 mm x 108.2 mm)		
Weight			16.5 lbs (7.5 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.

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## 600V Systems

maximum output **30A**

Vxxx-i32-30 models		V525	V550	V575	V600
<b>Electrical</b>					
<b>Input</b>					
Maximum voltage per input	V	600	600	600	600
Maximum current (Imp) per input	A	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26
MPP tracking voltage range	V	300 - 450	300 - 475	300 - 500	300 - 525
Startup voltage per input	V	390	390	390	390
Number of inputs		2	2	2	2
<b>Output</b>					
Output voltage range	V	0 - 525	0 - 550	0 - 575	0 - 600
Maximum output voltage at full power	V	450	475	500	525
Output voltage at zero power	V	525	550	575	600
Maximum output current	A	30	30	30	30
Maximum continuous output power	kWdc	13.3	14.1	14.8	15.6
Efficiency (max / CEC / Euro)	%		99.3 / 99.3 / 99.2		
<b>Mechanical</b>					
Input & output connector		Stäubli MC4-Evo 2			
Dimensions		15.85" x 9.45" x 4.26" (402.6 mm x 240 mm x 108.2 mm)			
Weight		16.5 lbs (7.5 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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# i32 String Optimizer

## 600V Systems

maximum output **28A**

Vxxx-i32-28 models		V525	V550	V575	V600
<b>Electrical</b>					
<b>Input</b>					
Maximum voltage per input	V	600	600	600	600
Maximum current (Imp) per input	A	22.4	22.4	22.4	22.4
Maximum short-circuit current (Isc) per input	A	24.4	24.4	24.4	24.4
MPP tracking voltage range	V	300 - 455	300 - 480	300 - 505	300 - 530
Startup voltage per input	V	390	390	390	390
Number of inputs		2	2	2	2
<b>Output</b>					
Output voltage range	V	0 - 525	0 - 550	0 - 575	0 - 600
Maximum output voltage at full power	V	455	480	505	530
Output voltage at zero power	V	525	550	575	600
Maximum output current	A	28	28	28	28
Maximum continuous output power	kWdc	12.6	13.3	14.0	14.7
Efficiency (max / CEC / Euro)	%		99.3 / 99.3 / 99.2		
<b>Mechanical</b>					
Input & output connector		Stäubli MC4-Evo 2			
Dimensions		15.85" x 9.45" x 4.26" (402.6 mm x 240 mm x 108.2 mm)			
Weight		16.5 lbs (7.5 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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# i32 String Optimizer

## 600V Systems

maximum output **25A**

Vxxx-i32-25 models		V525	V550	V575	V600
<b>Electrical</b>					
<b>Input</b>					
Maximum voltage per input	V	600	600	600	600
Maximum current (Imp) per input	A	20	20	20	20
Maximum short-circuit current (Isc) per input	A	22	22	22	22
MPP tracking voltage range	V	300 - 460	300 - 485	300 - 510	300 - 535
Startup voltage per input	V	390	390	390	390
Number of inputs		2	2	2	2
<b>Output</b>					
Output voltage range	V	0 - 525	0 - 550	0 - 575	0 - 600
Maximum output voltage at full power	V	460	485	510	535
Output voltage at zero power	V	525	550	575	600
Maximum output current	A	25	25	25	25
Maximum continuous output power	kWdc	11.4	12.0	12.7	13.3
Efficiency (max / CEC / Euro)	%		99.3 / 99.3 / 99.2		
<b>Mechanical</b>					
Input & output connector		Stäubli MC4-Evo 2			
Dimensions		15.85" x 9.45" x 4.26" (402.6 mm x 240 mm x 108.2 mm)			
Weight		16.5 lbs (7.5 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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## 600V Systems

maximum output **24A**

Vxxx-i32-24 models		V525	V550	V575	V600
<b>Electrical</b>					
<b>Input</b>					
Maximum voltage per input	V	600	600	600	600
Maximum current (Imp) per input	A	19.2	19.2	19.2	19.2
Maximum short-circuit current (Isc) per input	A	21.2	21.2	21.2	21.2
MPP tracking voltage range	V	300 - 465	300 - 490	300 - 515	300 - 540
Startup voltage per input	V	390	390	390	390
Number of inputs		2	2	2	2
<b>Output</b>					
Output voltage range	V	0 - 525	0 - 550	0 - 575	0 - 600
Maximum output voltage at full power	V	465	490	515	540
Output voltage at zero power	V	525	550	575	600
Maximum output current	A	24	24	24	24
Maximum continuous output power	kWdc	11.0	11.6	12.2	12.8
Efficiency (max / CEC / Euro)	%		99.3 / 99.3 / 99.2		
<b>Mechanical</b>					
Input & output connector		Stäubli MC4-Evo 2			
Dimensions		15.85" x 9.45" x 4.26" (402.6 mm x 240 mm x 108.2 mm)			
Weight		16.5 lbs (7.5 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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