

i32 String Optimizer

1500V Systems

maximum
output **32A**

Vxxx-i32-32 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	24	24	24	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26	26	26	26
MPP tracking voltage range	V	300 - 1270	300 - 1295	300 - 1320	300 - 1345	300 - 1370	300 - 1395	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1270	1295	1320	1345	1370	1395	1420
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	32	32	32	32	32	32	32
Maximum continuous output power	kWdc	40.4	41.2	42.0	42.8	43.6	44.4	45.0
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

Follow Ampt design guidelines to identify possible derating at high ambient temperatures or altitudes.

i32 String Optimizer

1500V Systems

maximum output **32A**

Vxxx-i32-32 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	24	24	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26	26	26
MPP tracking voltage range	V	300 - 1120	300 - 1145	300 - 1170	300 - 1195	300 - 1220	300 - 1245
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1120	1145	1170	1195	1220	1245
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	32	32	32	32	32	32
Maximum continuous output power	kWdc	35.6	36.4	37.2	38.0	38.8	39.6
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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1500V Systems

maximum output **30A**

Vxxx-i32-30 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	24	24	24	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26	26	26	26
MPP tracking voltage range	V	300 - 1275	300 - 1300	300 - 1325	300 - 1350	300 - 1375	300 - 1400	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1275	1300	1325	1350	1375	1400	1425
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	30	30	30	30	30	30	30
Maximum continuous output power	kWdc	38.1	38.8	39.6	40.3	41.1	41.8	42.6
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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1500V Systems

maximum output **30A**

Vxxx-i32-30 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	24	24	24	24	24	24
Maximum short-circuit current (Isc) per input	A	26	26	26	26	26	26
MPP tracking voltage range	V	300 - 1125	300 - 1150	300 - 1175	300 - 1200	300 - 1225	300 - 1250
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1125	1150	1175	1200	1225	1250
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	30	30	30	30	30	30
Maximum continuous output power	kWdc	33.6	34.3	35.1	35.8	36.6	37.3
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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1500V Systems

maximum output **28A**

Vxxx-i32-28 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	22.4	22.4	22.4	22.4	22.4	22.4	22.4
Maximum short-circuit current (Isc) per input	A	24.4	24.4	24.4	24.4	24.4	24.4	24.4
MPP tracking voltage range	V	300 - 1280	300 - 1305	300 - 1330	300 - 1355	300 - 1380	300 - 1400	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1280	1305	1330	1355	1380	1405	1430
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	28	28	28	28	28	28	28
Maximum continuous output power	kWdc	35.7	36.4	37.1	37.8	38.5	39.2	39.9
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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1500V Systems

maximum output **28A**

Vxxx-i32-28 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	22.4	22.4	22.4	22.4	22.4	22.4
Maximum short-circuit current (Isc) per input	A	24.4	24.4	24.4	24.4	24.4	24.4
MPP tracking voltage range	V	300 - 1130	300 - 1155	300 - 1180	300 - 1205	300 - 1230	300 - 1255
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1130	1155	1180	1205	1230	1255
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	28	28	28	28	28	28
Maximum continuous output power	kWdc	31.5	32.2	32.9	33.6	34.3	35.0
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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1500V Systems

maximum output **25A**

Vxxx-i32-25 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	20	20	20	20	20	20	20
Maximum short-circuit current (Isc) per input	A	22	22	22	22	22	22	22
MPP tracking voltage range	V	300 - 1285	300 - 1310	300 - 1335	300 - 1360	300 - 1385	300 - 1400	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1285	1310	1335	1360	1385	1410	1435
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	25	25	25	25	25	25	25
Maximum continuous output power	kWdc	32.0	32.7	33.3	33.9	34.5	35.2	35.8
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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i32 String Optimizer

1500V Systems

maximum output **25A**

Vxxx-i32-25 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	20	20	20	20	20	20
Maximum short-circuit current (Isc) per input	A	22	22	22	22	22	22
MPP tracking voltage range	V	300 - 1135	300 - 1160	300 - 1185	300 - 1210	300 - 1235	300 - 1260
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1135	1160	1185	1210	1235	1260
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	25	25	25	25	25	25
Maximum continuous output power	kWdc	28.3	28.9	29.5	30.2	30.8	31.4
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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1500V Systems

maximum
output **24A**

Vxxx-i32-24 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Maximum short-circuit current (Isc) per input	A	21.2	21.2	21.2	21.2	21.2	21.2	21.2
MPP tracking voltage range	V	300 - 1290	300 - 1315	300 - 1340	300 - 1365	300 - 1390	300 - 1400	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1290	1315	1340	1365	1390	1415	1440
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	24	24	24	24	24	24	24
Maximum continuous output power	kWdc	30.8	31.4	32.0	32.6	33.2	33.8	34.4
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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1500V Systems

maximum
output **24A**

Vxxx-i32-24 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	19.2	19.2	19.2	19.2	19.2	19.2
Maximum short-circuit current (Isc) per input	A	21.2	21.2	21.2	21.2	21.2	21.2
MPP tracking voltage range	V	300 - 1140	300 - 1165	300 - 1190	300 - 1215	300 - 1240	300 - 1265
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1140	1165	1190	1215	1240	1265
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	24	24	24	24	24	24
Maximum continuous output power	kWdc	27.2	27.8	28.4	29.0	29.6	30.2
Efficiency (max / CEC / Euro)	%	99.5 / 99.4 / 99.3					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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i32 String Optimizer

1500V Systems

maximum output **20A**

Vxxx-i32-20 models		V1350	V1375	V1400	V1425	V1450	V1475	V1500
Electrical								
Input								
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	16	16	16	16	16	16	16
Maximum short-circuit current (Isc) per input	A	18	18	18	18	18	18	18
MPP tracking voltage range	V	300 - 1300	300 - 1325	300 - 1350	300 - 1375	300 - 1400	300 - 1400	300 - 1400
Startup voltage per input	V	390	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2	2
Output								
Output voltage range	V	0 - 1350	0 - 1375	0 - 1400	0 - 1425	0 - 1450	0 - 1475	0 - 1500
Maximum output voltage at full power	V	1300	1325	1350	1375	1400	1425	1450
Output voltage at zero power	V	1350	1375	1400	1425	1450	1475	1500
Maximum output current	A	20	20	20	20	20	20	20
Maximum continuous output power	kWdc	25.9	26.4	26.9	27.4	27.9	28.4	28.9
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2						
Mechanical								
Input & output connector	Stäubli MC4-Evo 2							
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)							
Weight	19 lbs. (8.6 kg)							
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)							
Cooling	Convection							
Environmental								
Environmental category	Outdoor							
Pollution degree	2							
Maximum operating altitude	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							

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1500V Systems

maximum output **20A**

Vxxx-i32-20 models		V1200	V1225	V1250	V1275	V1300	V1325
Electrical							
Input							
Maximum voltage per input	V	1500	1500	1500	1500	1500	1500
Maximum current (Imp) per input	A	16	16	16	16	16	16
Maximum short-circuit current (Isc) per input	A	18	18	18	18	18	18
MPP tracking voltage range	V	300 - 1150	300 - 1175	300 - 1200	300 - 1225	300 - 1250	300 - 1275
Startup voltage per input	V	390	390	390	390	390	390
Number of inputs		2	2	2	2	2	2
Output							
Output voltage range	V	0 - 1200	0 - 1225	0 - 1250	0 - 1275	0 - 1300	0 - 1325
Maximum output voltage at full power	V	1150	1175	1200	1225	1250	1275
Output voltage at zero power	V	1200	1225	1250	1275	1300	1325
Maximum output current	A	20	20	20	20	20	20
Maximum continuous output power	kWdc	22.9	23.4	23.9	24.4	24.9	25.4
Efficiency (max / CEC / Euro)	%	99.5 / 99.3 / 99.2					
Mechanical							
Input & output connector	Stäubli MC4-Evo 2						
Dimensions	18.41" x 9.45" x 4.26" (467.6 mm x 240 mm x 108.2 mm)						
Weight	19 lbs. (8.6 kg)						
Ambient temperature operating range	-40 °F – 131 °F (-40 °C – 55 °C)						
Cooling	Convection						
Environmental							
Environmental category	Outdoor						
Pollution degree	2						
Maximum operating altitude	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						

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