Manufacturer: SMA Solar Technology AG

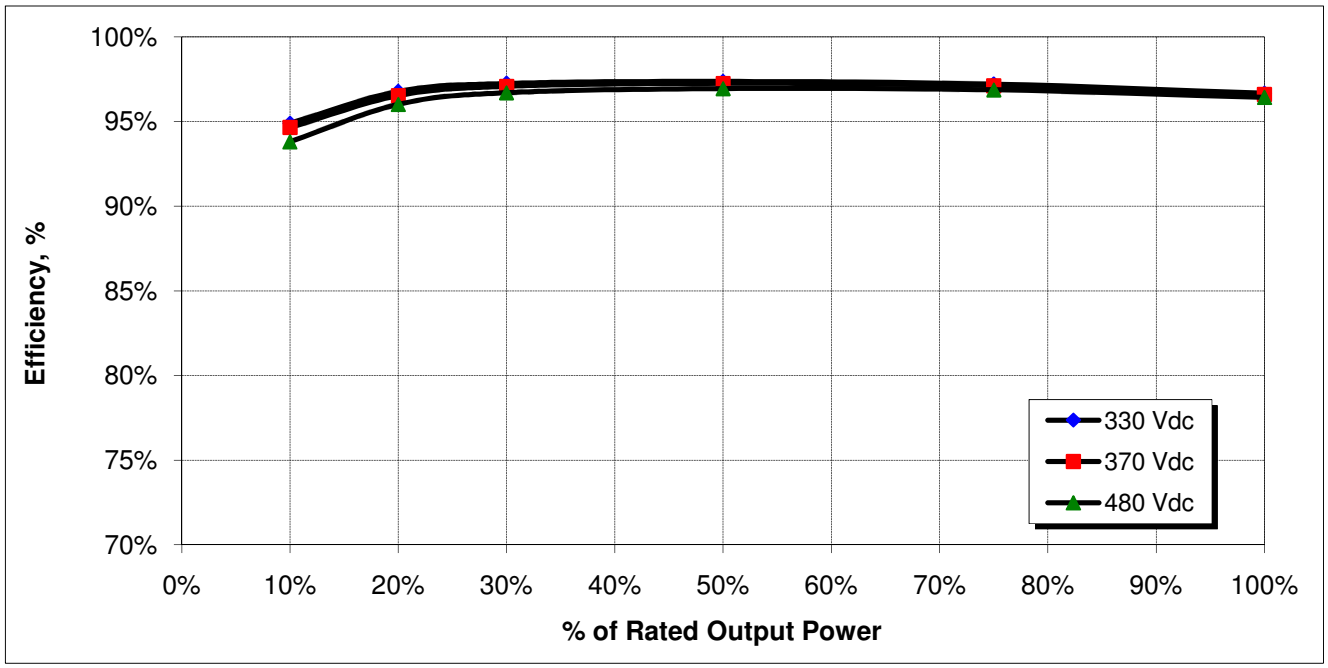
Model #: SC500U

Rated Maximum Continuous Output Power: 506.7 kW Night Tare Loss: 79.3 W

Vmin: 330 Vdc Vnom: 370 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		50.67	101.34	152.01	253.35	380.03	506.70	Wtd
Vmin	330	94.89%	96.78%	97.25%	97.37%	97.22%	96.67%	97.11%
Vnom	370	94.64%	96.52%	97.07%	97.25%	97.11%	96.59%	96.98%
Vmax	480	93.80%	96.01%	96.69%	96.94%	96.86%	96.42%	96.67%

CEC Efficiency = 97.0%



Inverter Efficiency Data

Minimum of 5 samples required

Specified		Sample #1			Sample #2			Sample #3			Sample #4			Sample #5		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	54.565	331.91	94.63%	57.094	331.46	94.83%	55.660	331.7	94.81%	55.021	331.67	94.92%	57.361	332.94	94.97%
20%	Vmin	104.378	331.06	96.83%	105.548	330.78	96.71%	105.610	331.25	96.74%	103.512	330.44	96.68%	105.325	331.84	96.89%
30%	Vmin	158.583	331.49	97.25%	156.509	332.19	97.26%	158.075	331.6	97.43%	157.798	332.92	97.17%	156.151	331.69	97.20%
50%	Vmin	252.198	331.38	97.34%	254.839	331.54	97.35%	253.821	331.33	97.42%	252.352	331.23	97.34%	254.514	330.33	97.43%
75%	Vmin	354.649	329.58	97.20%	352.453	330.21	97.22%	355.358	330.08	97.22%	354.371	330.4	97.21%	352.543	330.44	97.21%
100%	Vmin	478.348	330.21	96.65%	478.476	330.22	96.67%	477.926	330.59	96.66%	477.382	330.38	96.64%	480.678	330.17	96.68%
10%	Vnom	57.203	371.05	94.78%	54.023	371.46	94.60%	56.381	370.92	94.27%	57.515	372.28	94.50%	54.035	370.25	94.49%
20%	Vnom	104.421	372.45	96.38%	107.272	371.07	96.58%	103.823	371.16	96.51%	104.670	371.64	96.42%	107.259	370.69	96.67%
30%	Vnom	159.530	371.39	96.98%	160.974	370.94	97.10%	157.318	371.41	97.08%	160.833	369.69	97.20%	159.977	370.31	97.06%
50%	Vnom	253.364	370.79	97.24%	253.056	372.49	97.30%	254.166	370.65	97.24%	252.619	372.13	97.24%	253.969	370.25	97.24%
75%	Vnom	353.440	371.67	97.07%	353.381	371.36	97.10%	352.441	371	97.11%	353.496	371.93	97.11%	353.316	371.74	97.11%
100%	Vnom	476.852	370.39	96.62%	475.332	370.39	96.60%	479.982	370.08	96.57%	476.843	370.63	96.57%	475.047	371.09	96.61%
10%	Vmax	52.346	481.04	93.35%	58.561	480.94	94.11%	53.148	481.96	93.97%	52.118	481.89	92.89%	58.518	481.02	94.56%
20%	Vmax	102.169	481.97	96.02%	107.224	481.69	95.98%	106.761	481.97	96.01%	101.840	479.97	95.75%	106.958	480.62	96.26%
30%	Vmax	153.724	481.56	96.67%	158.638	480.25	96.57%	159.378	480.37	96.73%	154.330	481.74	96.75%	158.978	479.79	96.68%
50%	Vmax	250.824	482.3	97.01%	254.706	482.63	96.90%	254.444	482.26	96.90%	250.919	481.23	96.97%	255.132	482.49	96.90%
75%	Vmax	350.854	480.2	96.91%	353.351	481.08	96.87%	356.232	479.49	96.94%	350.496	480.24	96.79%	354.295	480.32	96.83%
100%	Vmax	479.756	479.84	96.41%	475.075	479.81	96.48%	479.680	479.87	96.43%	480.456	480.17	96.40%	476.056	479.87	96.45%

Specified		Sample #6			Sample #7			Sample #8			Sample #9			Sample #10		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	55.803	333.3	94.87%	55.004	332.2	94.93%	57.371	331.6	95.22%	55.688	332.9	95.06%	54.249	332.1	94.69%
20%	Vmin	105.777	332.3	96.93%	104.186	331.4	96.83%	105.225	330.8	96.68%	106.002	332.0	96.84%	104.013	331.6	96.70%
30%	Vmin	157.352	332.3	97.20%	158.288	332.4	97.37%	155.982	332.9	97.26%	157.998	332.5	97.23%	157.723	332.6	97.15%
50%	Vmin	253.816	330.7	97.36%	252.566	331.3	97.34%	254.244	330.6	97.41%	253.675	331.7	97.43%	252.510	330.7	97.32%
75%	Vmin	354.780	330.2	97.19%	354.552	330.1	97.25%	352.827	329.9	97.25%	354.032	329.8	97.15%	354.009	329.6	97.27%
100%	Vmin	478.707	330.8	96.74%	477.401	330.2	96.72%	480.475	330.0	96.59%	478.570	330.8	96.64%	477.518	330.2	96.74%
10%	Vnom	55.989	370.2	94.69%	57.655	372.0	94.80%	53.745	371.9	94.75%	55.819	370.3	94.68%	58.211	370.1	94.89%
20%	Vnom	103.648	372.6	96.50%	104.974	370.9	96.68%	107.120	371.7	96.37%	104.519	372.6	96.69%	104.309	372.9	96.43%
30%	Vnom	157.368	371.5	97.05%	160.949	371.4	97.15%	159.580	370.6	96.83%	157.956	371.3	97.14%	160.900	371.5	97.16%
50%	Vnom	254.415	372.3	97.25%	252.352	371.9	97.21%	254.273	372.5	97.24%	254.315	372.0	97.22%	252.315	370.8	97.28%
75%	Vnom	351.870	371.3	97.18%	353.580	370.9	97.13%	353.029	371.5	97.14%	351.412	372.1	97.10%	354.303	371.1	97.07%
100%	Vnom	480.131	370.4	96.61%	476.756	370.5	96.54%	476.353	370.7	96.60%	478.176	370.9	96.63%	476.090	370.8	96.59%
10%	Vmax	53.476	480.4	94.05%	52.340	481.6	93.36%	58.632	481.7	94.33%	53.073	480.7	93.58%	52.737	481.1	93.78%
20%	Vmax	107.483	480.8	95.97%	101.583	480.2	95.92%	105.556	481.8	96.00%	108.092	480.4	96.17%	101.750	480.1	95.97%
30%	Vmax	158.798	479.8	96.61%	154.781	480.0	96.74%	160.066	479.7	96.76%	158.543	479.8	96.83%	154.499	480.9	96.60%
50%	Vmax	254.259	481.4	96.93%	251.534	482.6	96.93%	255.666	480.8	96.94%	253.472	482.0	96.90%	252.303	480.8	96.99%
75%	Vmax	355.250	480.3	96.97%	350.748	480.2	96.85%	354.218	480.6	96.76%	354.215	480.5	96.89%	350.345	480.4	96.85%
100%	Vmax	481.316	479.6	96.47%	477.629	479.3	96.43%	475.790	479.7	96.35%	481.867	479.6	96.42%	476.412	480.3	96.37%