Manufacturer: SMA Technology AG

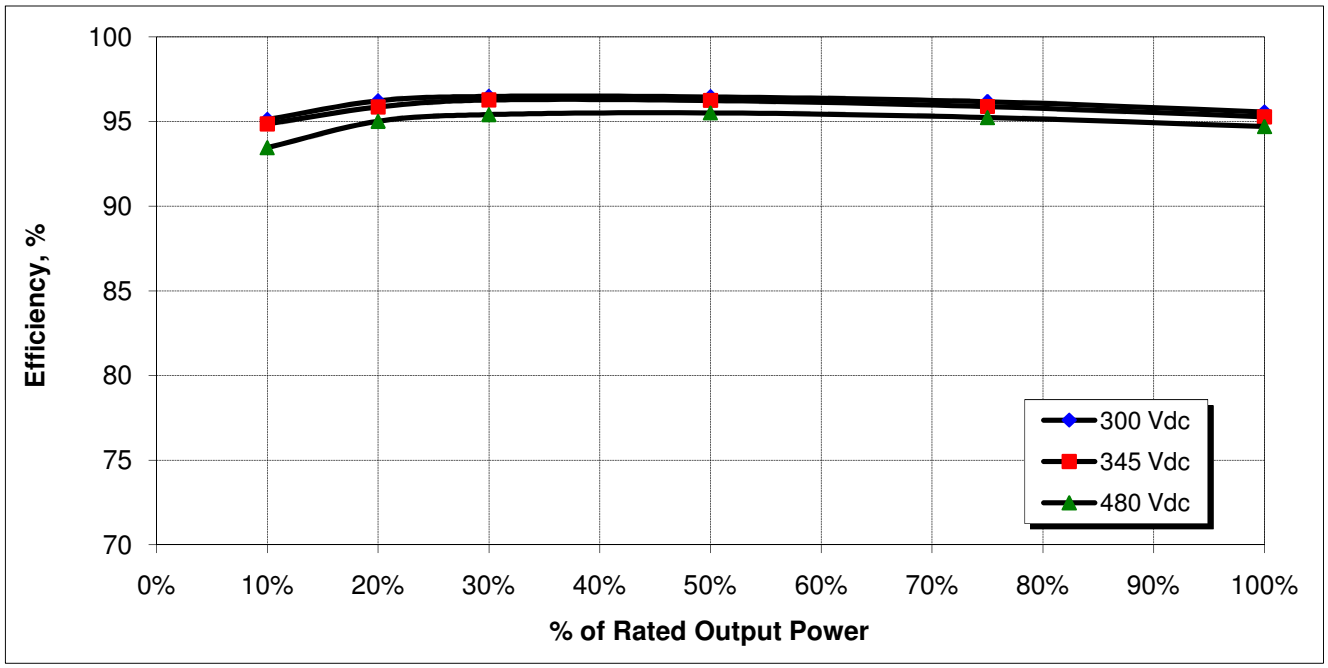
Model #: SB8000US

Rated Maximum Continuous Output Power: 8.00 kW Night Tare Loss: 0.15 W

Vmin: 300 Vdc Vnom: 345 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.80	1.60	2.40	4.00	6.00	8.00	Wtd
Vmin	300	95.1	96.2	96.5	96.5	96.2	95.6	96.2
Vnom	345	94.9	95.9	96.3	96.2	95.9	95.3	95.9
Vmax	480	93.5	95.0	95.4	95.5	95.2	94.7	95.2

CEC Efficiency = 96.0%



NOTE: Spreadsheet is for Unit Operating in 277 VAC Output Mode.

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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	954.5	301.1	95.110	956.6	301.1	95.097	955.8	301.1	95.130	957.4	301.1	95.116	957.7	301.1	95.116
20%	Vmin	1752.4	300.8	96.214	1752	300.8	96.211	1753	300.8	96.207	1751	300.8	96.222	1753	300.8	96.220
30%	Vmin	2591.9	300.4	96.484	2593	300.4	96.471	2592	300.4	96.482	2592	300.4	96.478	2592	300.4	96.493
50%	Vmin	3604	301.7	96.454	3604	301.7	96.461	3604	301.7	96.448	3604	301.7	96.456	3605	301.7	96.456
75%	Vmin	5611.8	300.5	96.178	5600	300.5	96.170	5599	300.5	96.170	5600	300.5	96.172	5600	300.5	96.173
100%	Vmin	7606.2	300.7	95.562	7608	300.7	95.564	7607	300.7	95.561	7608	300.7	95.563	7607	300.7	95.566
10%	Vnom	950.84	345.6	94.777	948.5	345.6	94.791	949.2	345.6	94.918	949.4	345.6	94.845	949.5	345.6	94.907
20%	Vnom	1591.3	345.4	95.844	1591	345.4	95.844	1591	345.4	95.868	1591	345.4	95.873	1591	345.4	95.848
30%	Vnom	2592.5	345.1	96.270	2593	345.1	96.280	2594	345.1	96.288	2591	345.1	96.272	2592	345.1	96.270
50%	Vnom	3635.6	345.7	96.244	3630	345.7	96.247	3615	345.7	96.247	3613	345.7	96.237	3614	345.7	96.255
75%	Vnom	5621.6	345	95.889	5622	345	95.896	5621	345	95.890	5622	345	95.890	5620	345	95.887
100%	Vnom	7603.7	346.2	95.274	7604	346.2	95.277	7604	346.2	95.276	7604	346.2	95.280	7604	346.2	95.284
10%	Vmax	947.35	481.2	93.455	947	481.2	93.411	946.8	481.2	93.480	947.1	481.2	93.473	947	481.2	93.471
20%	Vmax	1749.7	481.4	95.054	1749	481.4	95.004	1750	481.4	95.025	1750	481.4	95.012	1750	481.2	95.013
30%	Vmax	2580.7	481.2	95.394	2580	481.2	95.397	2580	481.2	95.403	2580	481.2	95.412	2581	481.2	95.422
50%	Vmax	3622.4	481	95.509	3623	481	95.511	3622	481	95.516	3622	481	95.516	3618	481	95.506
75%	Vmax	5602.3	482	95.206	5602	481.4	95.225	5603	481.3	95.240	5602	481.1	95.245	5602	481.1	95.245
100%	Vmax	7607.9	480.6	94.709	7609	480.6	94.702	7610	480.6	94.709	7611	480.6	94.698	7610	480.6	94.703

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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	957.52	301.1	95.120	957	301.1	95.101	956.1	301.1	95.096	957.4	301.1	95.143	958.1	301.1	95.138
20%	Vmin	1752.8	300.8	96.221	1753	300.8	96.226	1752	300.8	96.236	1753	300.8	96.231	1753	300.8	96.209
30%	Vmin	2591.6	300.4	96.506	2593	300.4	96.485	2594	300.4	96.486	2593	300.4	96.474	2592	300.4	96.470
50%	Vmin	3603.8	301.7	96.454	3604	301.7	96.460	3604	301.7	96.453	3605	301.7	96.457	3604	301.7	96.452
75%	Vmin	5600.3	300.5	96.162	5599	300.5	96.171	5599	300.5	96.162	5600	300.5	96.168	5599	300.5	96.163
100%	Vmin	7606.7	300.7	95.561	7606	300.7	95.562	7607	300.7	95.563	7606	300.7	95.562	7607	300.7	95.560
10%	Vnom	948.61	345.6	94.892	949.7	345.6	94.731	947	345.6	94.952	947.3	345.6	94.857	949.1	345.6	94.856
20%	Vnom	1590.9	345.4	95.856	1591	345.4	95.854	1592	345.4	95.864	1591	345.4	95.875	1592	345.4	95.858
30%	Vnom	2593.7	345.1	96.264	2593	345.1	96.279	2592	345.1	96.281	2593	345.1	96.269	2593	345.1	96.279
50%	Vnom	3613.1	345.7	96.244	3606	345.7	96.251	3607	345.7	96.253	3606	345.7	96.243	3606	345.7	96.235
75%	Vnom	5620.6	345	95.883	5621	345	95.880	5621	345	95.881	5620	345	95.881	5620	345	95.880
100%	Vnom	7603.8	346.2	95.276	7604	346.2	95.276	7604	346.2	95.275	7604	346.2	95.279	7604	346.2	95.280
10%	Vmax	947.41	481.2	93.448	947	481.2	93.441	947.2	481.2	93.452	947	481.2	93.416	947.3	481.2	93.475
20%	Vmax	1751.3	481	94.973	1752	481	94.995	1752	481	95.023	1751	481	95.012	1753	480.9	95.022
30%	Vmax	2580.6	481.2	95.412	2581	481.2	95.422	2580	481.2	95.401	2582	481.2	95.423	2582	481.2	95.432
50%	Vmax	3599.1	481	95.516	3615	481	95.504	3614	481	95.509	3609	481	95.525	3608	481	95.514
75%	Vmax	5601.5	481.1	95.244	5602	481.1	95.248	5602	481.1	95.238	5602	481.1	95.246	5603	481.1	95.243
100%	Vmax	7609.9	480.6	94.694	7609	480.6	94.703	7610	480.6	94.699	7611	480.6	94.698	7610	480.6	94.697