Manufacturer: Sustainable Energy Technologies

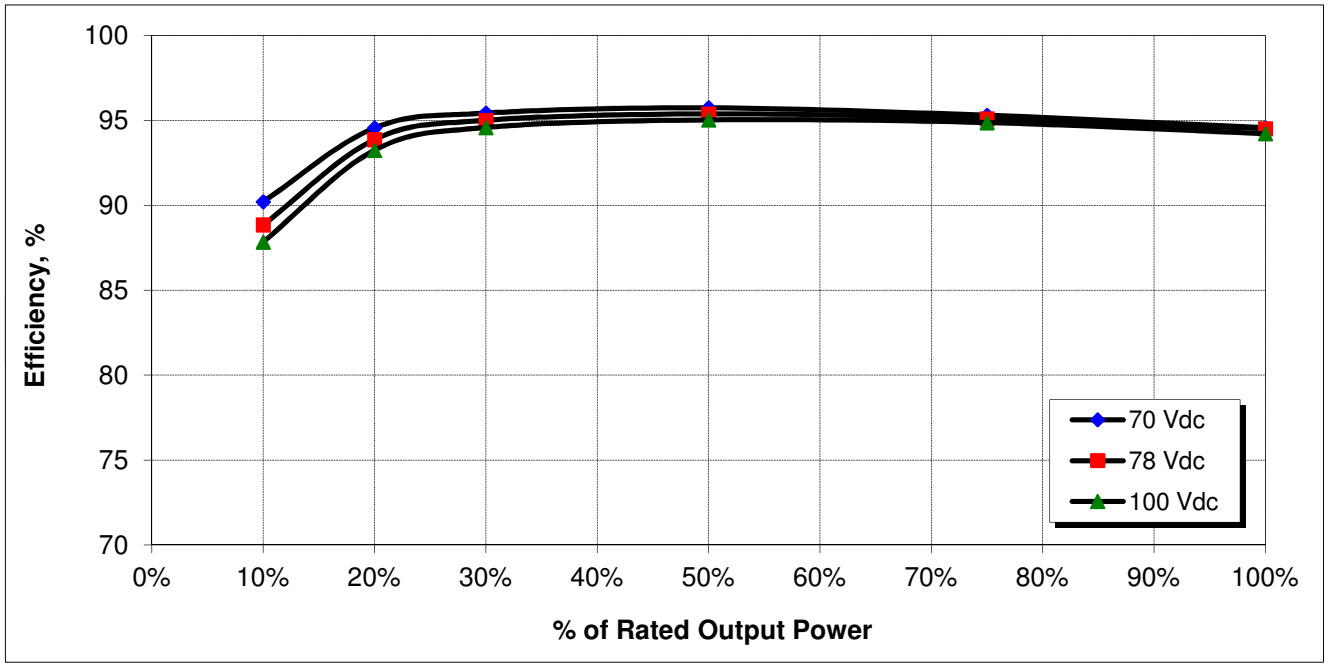
Model #: Sunergy 5000-70/240

Rated Maximum Continuous Output Power: 5.009 kW Night Tare Loss: -0.52 W

Vmin: 70 Vdc Vnom: 78 Vdc Vmax: 100 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.50	1.00	1.50	2.50	3.76	5.01	Wtd
Vmin	70	90.2	94.6	95.4	95.7	95.3	94.6	95.1
Vnom	78	88.8	93.9	95.0	95.4	95.1	94.5	94.8
Vmax	100	87.8	93.2	94.6	95.0	94.9	94.2	94.5

CEC Efficiency = 95.0%



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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	498	70.92	90.217	497.9	70.92	90.193	498.1	70.92	90.236	497.9	70.92	90.199	498	70.92	90.211
20%	Vmin	1097.8	70.87	94.559	1098	70.87	94.548	1098	70.87	94.551	1098	70.87	94.554	1098	70.87	94.559
30%	Vmin	1621.4	70.79	95.431	1621	70.79	95.431	1621	70.797	95.435	1621	70.79	95.437	1621	70.79	95.431
50%	Vmin	2255.5	70.82	95.722	2256	70.82	95.743	2256	70.823	95.741	2256	70.82	95.741	2256	70.823	95.748
75%	Vmin	3508.9	70.807	95.299	3509	70.81	95.301	3509	70.807	95.291	3509	70.803	95.305	3509	70.807	95.303
100%	Vmin	4754.8	70.823	94.578	4758	70.81	94.565	4757	70.81	94.569	4757	70.8	94.566	4756	70.8	94.562
10%	Vnom	496.6	78.753	88.837	496.7	78.76	88.861	496.7	78.76	88.855	496.5	78.76	88.825	496.5	78.757	88.825
20%	Vnom	1096.1	78.74	93.871	1096	78.74	93.844	1096	78.74	93.850	1096	78.74	93.841	1096	78.74	93.847
30%	Vnom	1624.1	78.74	94.977	1623	78.72	94.995	1623	78.7	95.002	1623	78.7	95.000	1623	78.7	95.002
50%	Vnom	2253.5	78.69	95.365	2254	78.69	95.375	2254	78.69	95.367	2254	78.69	95.369	2254	78.69	95.369
75%	Vnom	3506.8	78.71	95.088	3507	78.71	95.104	3507	78.71	95.094	3507	78.71	95.103	3507	78.71	95.094
100%	Vnom	4753.1	78.5	94.526	4756	78.503	94.518	4757	78.5	94.514	4757	78.5	94.516	4757	78.5	94.510
10%	Vmax	496.37	99.81	87.853	496.5	99.81	87.870	496.4	99.81	87.858	496.3	99.81	87.847	496.2	99.81	87.829
20%	Vmax	1097.5	99.763	93.243	1097	99.767	93.231	1097	99.77	93.231	1097	99.77	93.243	1097	99.77	93.226
30%	Vmax	1622	99.8	94.594	1623	99.8	94.567	1623	99.8	94.573	1623	99.8	94.577	1623	99.8	94.567
50%	Vmax	2253.1	99.757	94.999	2253	99.753	95.023	2253	99.76	95.029	2253	99.753	95.027	2253	99.76	95.029
75%	Vmax	3503.3	99.75	94.863	3503	99.75	94.867	3504	99.76	94.870	3503	99.75	94.867	3503	99.753	94.864
100%	Vmax	4758.2	99.75	94.204	4759	99.76	94.212	4759	99.76	94.214	4759	99.76	94.213	4759	99.76	94.212

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	498.03	70.92	90.223	497.9	70.92	90.199									
20%	Vmin	1097.7	70.87	94.551	1098	70.87	94.559									
30%	Vmin	1621.3	70.79	95.427	1622	70.79	95.438									
50%	Vmin	2255.8	70.82	95.748	2256	70.82	95.735									
75%	Vmin	3509.2	70.807	95.308	3509	70.81	95.308									
100%	Vmin	4756.3	70.8	94.559	4756	70.8	94.557									
10%	Vnom	496.8	78.76	88.873	496.6	78.76	88.837									
20%	Vnom	1096.4	78.747	93.873	1096	78.747	93.873									
30%	Vnom	1622.6	78.697	95.002	1622	78.69	94.992									
50%	Vnom	2253.6	78.69	95.370	2254	78.687	95.400									
75%	Vnom	3507	78.713	95.093	3507	78.713	95.099									
100%	Vnom	4756.4	78.5	94.504	4756	78.497	94.499									
10%	Vmax	496.27	99.81	87.783	496.3	99.81	87.841									
20%	Vmax	1097.4	99.77	93.240	1097	99.77	93.243									
30%	Vmax	1622.8	99.8	94.569	1623	99.8	94.573									
50%	Vmax	2253	99.753	95.025	2253	99.75	95.022									
75%	Vmax	3503.3	99.753	94.864	3503	99.757	94.865									
100%	Vmax	4758.9	99.763	94.205	4759	99.757	94.213									