Manufacturer: Growatt New Energy Co., Ltd

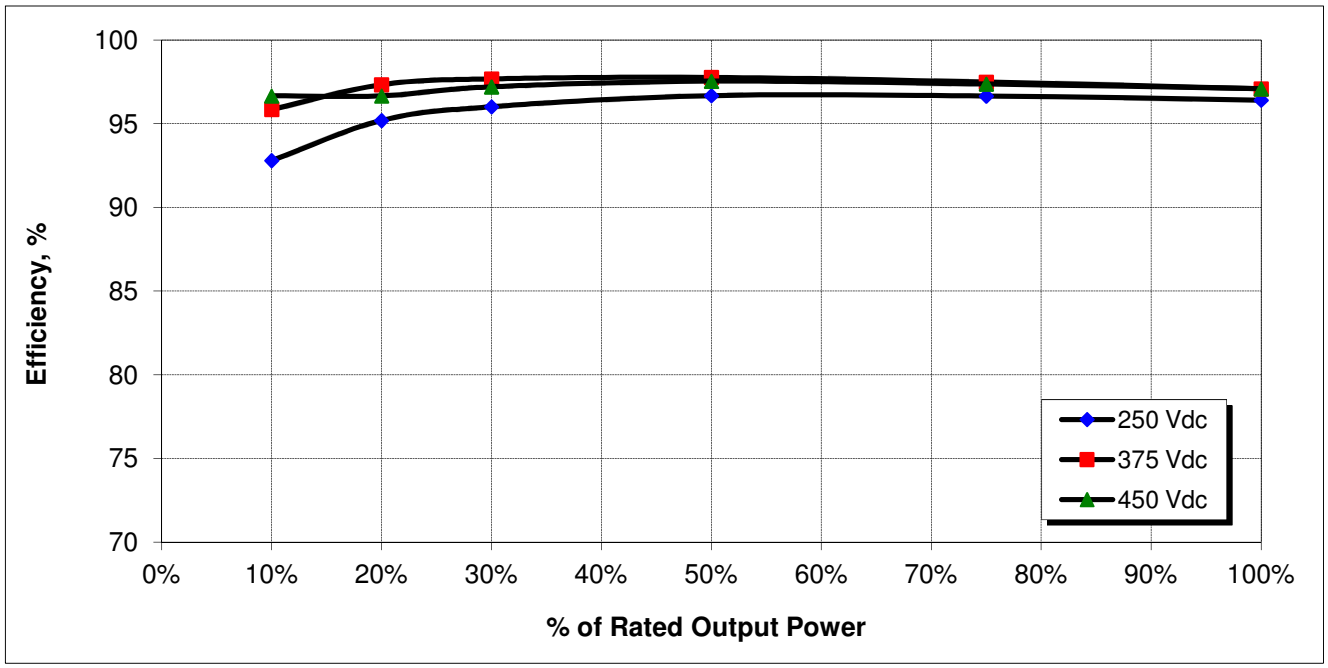
Model #: GROWATT 5000 MTL-US (240 Vac)

Rated Maximum Continuous Output Power: 4.60 kW Night Tare Loss: 0.36 W

Vmin: 250 Vdc Vnom: 375 Vdc Vmax: 450 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.46	0.92	1.38	2.30	3.45	4.60	Wtd
Vmin	250	92.8	95.2	96.0	96.7	96.6	96.4	96.3
Vnom	375	95.8	97.3	97.7	97.8	97.5	97.1	97.5
Vmax	450	96.7	96.7	97.2	97.5	97.4	97.1	97.3

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	0.4427	250.47	92.678	0.442	250.49	92.963	0.443	250.35	92.769	0.443	250.3	92.875	0.443	250.47	92.678
20%	Vmin	0.9544	250.63	95.282	0.953	250.52	95.113	0.955	250.47	95.146	0.954	250.67	95.116	0.954	250.63	95.282
30%	Vmin	1.3568	250.42	96.011	1.355	250.69	96.002	1.353	250.46	96.005	1.355	250.71	96.006	1.356	250.42	96.011
50%	Vmin	2.4116	250.4	96.671	2.408	250.4	96.664	2.407	250.52	96.667	2.409	250.47	96.672	2.409	250.4	96.671
75%	Vmin	3.5101	250.39	96.619	3.516	250.59	96.757	3.51	250.44	96.620	3.511	250.41	96.621	3.511	250.39	96.619
100%	Vmin	4.6123	250.49	96.398	4.612	250.36	96.404	4.606	250.53	96.406	4.609	250.48	96.402	4.608	250.49	96.398
10%	Vnom	0.4415	375.35	95.846	0.441	375.6	95.846	0.443	375.21	95.857	0.441	375.74	95.850	0.442	375.35	95.846
20%	Vnom	0.9545	375.53	97.327	0.954	375.7	97.324	0.955	375.55	97.328	0.954	375.55	97.323	0.953	375.53	97.327
30%	Vnom	1.3548	375.47	97.679	1.355	375.61	97.674	1.354	375.35	97.676	1.355	375.54	97.664	1.355	375.47	97.679
50%	Vnom	2.4073	375.43	97.763	2.408	375.66	97.760	2.408	375.45	97.761	2.407	375.62	97.761	2.41	375.43	97.763
75%	Vnom	3.5151	375.41	97.483	3.512	375.5	97.487	3.514	375.57	97.485	3.511	375.58	97.483	3.511	375.41	97.483
100%	Vnom	4.6117	375.61	97.150	4.593	372.68	96.804	4.611	375.35	97.149	4.613	375.58	97.150	4.612	375.61	97.150
10%	Vmax	0.9499	450.33	96.638	0.952	450.54	96.673	0.952	450.56	96.663	0.952	450.29	96.671	0.951	450.33	96.638
20%	Vmax	0.9499	450.33	96.638	0.952	450.54	96.673	0.952	450.56	96.663	0.952	450.29	96.671	0.951	450.33	96.638
30%	Vmax	1.3528	450.24	97.197	1.351	450.73	97.196	1.351	450.55	97.196	1.354	450.46	97.204	1.352	450.24	97.197
50%	Vmax	2.4076	450.31	97.535	2.408	450.53	97.531	2.409	450.59	97.531	2.408	450.31	97.535	2.407	450.31	97.535
75%	Vmax	3.5096	450.61	97.359	3.51	450.44	97.359	3.511	450.66	97.357	3.509	450.53	97.394	3.51	450.61	97.359
100%	Vmax	4.6089	450.6	97.078	4.609	450.5	97.084	4.608	450.55	97.083	4.61	450.55	97.078	4.61	450.6	97.078

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															
20%	Vmin															
30%	Vmin															
50%	Vmin															
75%	Vmin															
100%	Vmin															
10%	Vnom															
20%	Vnom															
30%	Vnom															
50%	Vnom															
75%	Vnom															
100%	Vnom															
10%	Vmax															
20%	Vmax															
30%	Vmax															
50%	Vmax															
75%	Vmax															
100%	Vmax															