Manufacturer: Petra Solar

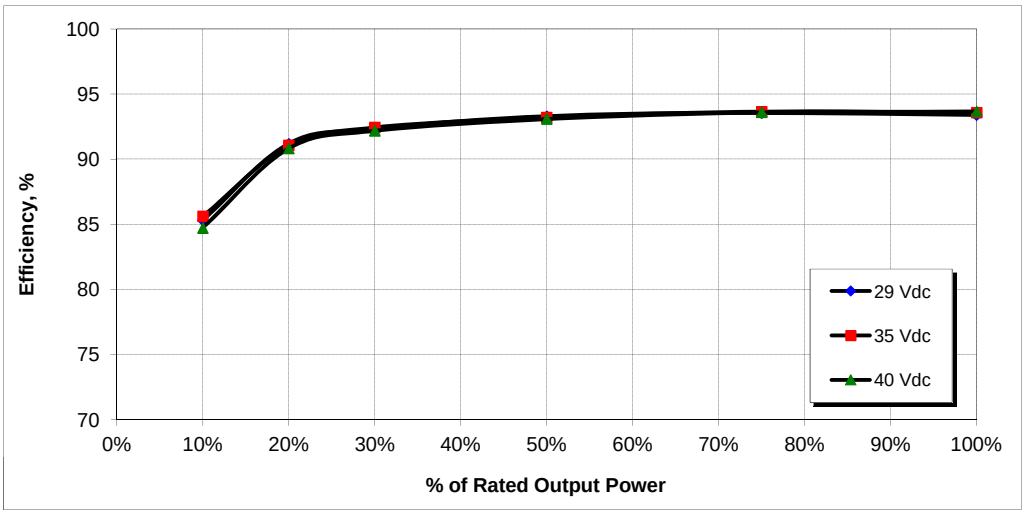
Model #: 103.10866.5004 (SN 170120413W024) (model with night com, representative of other models)

Rated Maximum Continuous Output Power @25°C: 200.0 W Night Tare Loss: -1.586 W (w/ night com)
-0.03 W (w/o night com)

Vmin: 29 Vdc Vnom: 35 Vdc Vmax: 40 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		20.00	40.00	60.00	100.00	150.00	200.00	Wtd
Vmin	29	85.3	91.2	92.3	93.3	93.6	93.4	92.9
Vnom	35	85.6	91.1	92.4	93.2	93.7	93.6	93.0
Vmax	40	84.7	90.8	92.2	93.1	93.6	93.7	92.8

CEC Efficiency = 93.0%



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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	18.997	29.315	85.058	19.150	29.315	85.733	19.008	29.317	85.105	19.027	29.314	85.182	19.008	29.315	85.106
20%	Vmin	43.639	29.334	91.141	43.625	29.334	91.106	43.803	29.335	91.480	43.589	29.335	91.026	43.754	29.336	91.374
30%	Vmin	64.158	29.346	92.196	64.155	29.346	92.195	64.176	29.346	92.220	64.157	29.344	92.201	64.161	29.344	92.205
50%	Vmin	109.708	29.376	93.326	109.675	29.375	93.298	109.676	29.376	93.298	109.682	29.376	93.303	109.760	29.378	93.365
75%	Vmin	153.950	29.397	93.518	154.012	29.400	93.544	154.013	29.399	93.548	154.001	29.399	93.539	154.014	29.400	93.548
100%	Vmin	190.633	28.946	93.402	190.610	28.946	93.393	190.556	28.943	93.372	190.600	28.946	93.387	190.636	28.945	93.404
10%	Vnom	19.782	34.341	85.862	19.735	34.342	85.649	19.766	34.342	85.794	19.768	34.342	85.791	19.766	34.341	85.800
20%	Vnom	43.371	34.355	90.748	43.371	34.355	90.748	43.568	34.357	91.147	43.568	34.357	91.147	43.613	34.358	91.243
30%	Vnom	64.436	34.363	92.313	64.593	34.364	92.544	64.430	34.364	92.302	64.659	34.364	92.638	64.436	34.364	92.315
50%	Vnom	109.524	34.353	93.195	109.539	34.355	93.203	109.557	34.356	93.220	109.531	34.355	93.195	109.532	34.355	93.203
75%	Vnom	151.521	34.419	93.662	151.533	34.418	93.668	151.543	34.419	93.673	151.516	34.419	93.656	151.534	34.419	93.668
100%	Vnom	190.146	34.424	93.582	190.118	34.424	93.569	190.158	34.424	93.589	190.136	34.424	93.577	190.145	34.424	93.583
10%	Vmax	19.572	40.347	84.777	19.580	40.350	84.821	19.574	40.349	84.781	19.584	40.349	84.838	19.514	40.349	84.510
20%	Vmax	43.676	40.363	90.910	43.649	40.363	90.846	43.482	40.363	90.508	43.633	40.363	90.813	43.679	40.364	90.917
30%	Vmax	64.276	40.369	91.973	64.450	40.372	92.210	64.461	40.371	92.230	64.428	40.369	92.188	64.455	40.369	92.228
50%	Vmax	109.093	40.395	93.084	109.131	40.395	93.120	109.100	40.394	93.093	109.098	40.395	93.096	109.100	40.395	93.091
75%	Vmax	151.432	40.414	93.632	151.418	40.414	93.624	151.414	40.414	93.623	151.329	40.411	93.579	151.338	40.411	93.583
100%	Vmax	191.114	40.393	93.666	191.140	40.392	93.680	191.130	40.394	93.673	191.126	40.392	93.674	191.135	40.394	93.673

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	19.003	29.315	85.073	19.200	29.315	85.971									
20%	Vmin	43.624	29.334	91.102	43.664	29.336	91.187									
30%	Vmin	64.380	29.345	92.520	64.450	29.346	92.610									
50%	Vmin	109.701	29.376	93.318	109.685	29.375	93.309									
75%	Vmin	154.095	29.402	93.588	154.088	29.403	93.585									
100%	Vmin	190.612	28.946	93.390	190.625	28.947	93.393									
10%	Vnom	19.781	34.342	85.850	19.495	34.342	84.620									
20%	Vnom	43.613	34.358	91.243	43.613	34.358	91.243									
30%	Vnom	64.461	34.363	92.362	64.682	34.363	92.670									
50%	Vnom	109.605	34.356	93.256	109.607	34.358	93.253									
75%	Vnom	151.532	34.418	93.667	151.551	34.419	93.679									
100%	Vnom	190.143	34.425	93.578	190.136	34.425	93.576									
10%	Vmax	19.547	40.349	84.668	19.539	40.349	84.619									
20%	Vmax	43.654	40.363	90.861	43.700	40.362	90.968									
30%	Vmax	64.481	40.370	92.259	64.452	40.373	92.213									
50%	Vmax	109.103	40.394	93.103	109.084	40.395	93.077									
75%	Vmax	151.399	40.414	93.614	151.422	40.415	93.625									
100%	Vmax	191.115	40.392	93.668	191.116	40.394	93.669									