Manufacturer: Advanced Energy Industries, Inc.

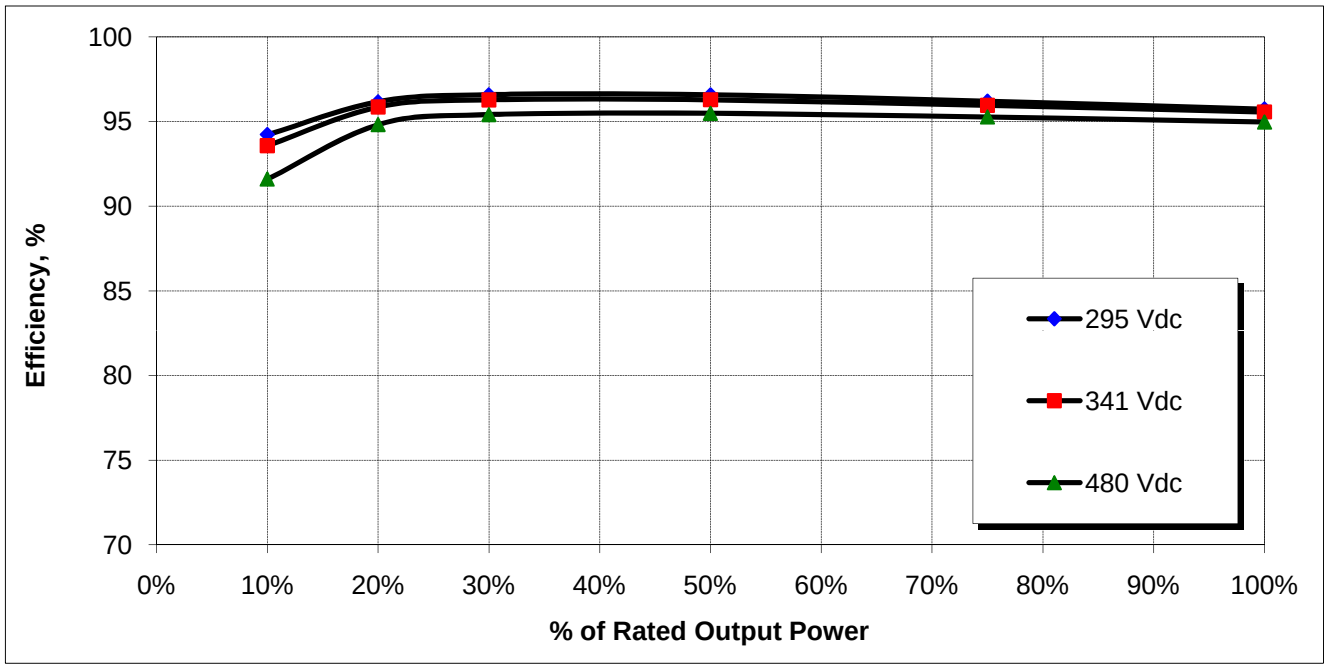
Model #: PVP50kW 600VAC

Rated Maximum Continuous Output Power: 50.00 kW Night Tare Loss: 43.00 W

Vmin: 295 Vdc Vnom: 341 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		5.00	10.00	15.00	25.00	37.50	50.00	Wtd
Vmin	295	94.2	96.2	96.6	96.6	96.2	95.7	96.2
Vnom	341	93.6	95.9	96.3	96.3	96.0	95.6	95.9
Vmax	480	91.6	94.8	95.4	95.5	95.3	95.0	95.1

CEC Efficiency = 96.0%



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	4979.5	295.9	94.24	4976.7	295.9	94.24	4977.7	295.9	94.23	4977.8	295.9	94.21	4983.0	295.9	94.23
20%	Vmin	10980.0	295.7	96.18	10981.0	295.7	96.17	10981.0	295.7	96.16	10985.0	295.7	96.17	10983.0	295.7	96.17
30%	Vmin	16229.0	295.6	96.58	16231.0	295.6	96.58	16228.0	295.6	96.58	16230.0	295.6	96.59	16231.0	295.6	96.58
50%	Vmin	22526.0	295.5	96.57	22526.0	295.5	96.58	22530.0	295.5	96.58	22525.0	295.4	96.59	22526.0	295.5	96.58
75%	Vmin	35025.0	295.2	96.19	35027.0	295.2	96.20	35028.0	295.2	96.19	35025.0	295.2	96.19	35023.0	295.2	96.18
100%	Vmin	47530.0	295.0	95.75	47527.0	294.9	95.76	47523.0	295.0	95.74	47526.0	295.0	95.74	47520.0	295.0	95.74
10%	Vnom	4974.8	342.0	93.59	4975.7	342.0	93.59	4973.7	342.0	93.57	4976.8	342.0	93.58	4975.5	342.0	93.58
20%	Vnom	10981.0	341.8	95.89	10982.0	341.9	95.88	10984.0	341.8	95.87	10982.0	341.8	95.86	10984.0	341.8	95.86
30%	Vnom	16234.0	341.8	96.26	16234.0	341.8	96.27	16233.0	341.8	96.27	16231.0	341.8	96.28	16232.0	341.8	96.29
50%	Vnom	22519.0	341.6	96.28	22520.0	341.7	96.27	22521.0	341.7	96.27	22526.0	341.7	96.27	22524.0	341.7	96.28
75%	Vnom	35026.0	341.4	95.93	35029.0	341.4	95.95	35025.0	341.3	95.96	35028.0	341.3	95.94	35021.0	341.4	95.95
100%	Vnom	47525.0	341.2	95.57	47522.0	341.2	95.56	47522.0	341.2	95.57	47523.0	341.2	95.57	47519.0	341.1	95.56
10%	Vmax	4970.9	481.3	91.65	4963.3	481.3	91.52	4963.4	481.3	91.56	4960.3	481.3	91.55	4955.1	481.3	91.55
20%	Vmax	10979.0	481.2	94.79	10980.0	481.2	94.80	10980.0	481.2	94.80	10980.0	481.2	94.81	10980.0	481.2	94.81
30%	Vmax	16215.0	481.2	95.40	16218.0	481.2	95.40	16222.0	481.2	95.39	16212.0	481.1	95.41	16207.0	481.1	95.41
50%	Vmax	22524.0	481.0	95.46	22525.0	481.0	95.47	22526.0	481.0	95.48	22530.0	481.0	95.47	22529.0	481.0	95.48
75%	Vmax	35026.0	480.9	95.26	35023.0	480.9	95.26	35018.0	480.9	95.27	35023.0	480.9	95.26	35018.0	480.8	95.26
100%	Vmax	47536.0	480.8	94.97	47540.0	480.8	94.96	47528.0	480.8	94.96	47536.0	480.7	94.96	47544.0	480.7	94.97

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	4980.9	295.9	94.23	4978.0	295.9	94.23	4978.1	295.9	94.21	4977.4	295.9	94.21	4977.6	295.9	94.21
20%	Vmin	10983.0	295.7	96.169	10982.0	295.7	96.171	10983.0	295.7	96.163	10983.0	295.7	96.160	10982.0	295.7	96.150
30%	Vmin	16227.0	295.6	96.583	16229.0	295.6	96.581	16228.0	295.6	96.588	16229.0	295.6	96.584	16226.0	295.6	96.587
50%	Vmin	22523.0	295.5	96.585	22527.0	295.5	96.582	22525.0	295.5	96.582	22531.0	295.5	96.584	22523.0	295.5	96.583
75%	Vmin	35023.0	295.2	96.194	35025.0	295.2	96.195	35021.0	295.2	96.203	35029.0	295.2	96.196	35025.0	295.2	96.205
100%	Vmin	47528.0	295.0	95.724	47533.0	295.0	95.727	47521.0	295.0	95.733	47525.0	295.0	95.734	47527.0	295.0	95.726
10%	Vnom	4975.9	342.0	93.572	4976.3	342.0	93.585	4974.7	342.0	93.578	4976.8	342.0	93.569	4978.0	342.0	93.584
20%	Vnom	10984.0	341.8	95.850	10985.0	341.9	95.830	10987.0	341.9	95.836	10982.0	341.9	95.835	10984.0	341.8	95.833
30%	Vnom	16234.0	341.8	96.290	16234.0	341.8	96.283	16233.0	341.8	96.282	16235.0	341.8	96.287	16235.0	341.7	96.285
50%	Vnom	22518.0	341.7	96.283	22520.0	341.7	96.285	22521.0	341.7	96.299	22522.0	341.7	96.301	22518.0	341.7	96.301
75%	Vnom	35022.0	341.4	95.951	35018.0	341.4	95.949	35023.0	341.3	95.955	35020.0	341.3	95.963	35018.0	341.3	95.962
100%	Vnom	47521.0	341.2	95.552	47523.0	341.2	95.561	47518.0	341.2	95.569	47522.0	341.2	95.577	47523.0	341.2	95.580
10%	Vmax	4952.1	481.3	91.553	4961.8	481.3	91.575	4962.1	481.3	91.593	4968.5	481.3	91.727	4970.7	481.3	91.696
20%	Vmax	10979.0	481.2	94.809	10980.0	481.2	94.808	10979.0	481.2	94.824	10980.0	481.2	94.817	10978.0	481.2	94.812
30%	Vmax	16204.0	481.1	95.415	16219.0	481.1	95.406	16222.0	481.1	95.405	16222.0	481.1	95.401	16228.0	481.1	95.399
50%	Vmax	22529.0	481.0	95.479	22528.0	481.0	95.489	22527.0	481.0	95.491	22528.0	481.0	95.487	22529.0	481.0	95.492
75%	Vmax	35021.0	480.9	95.262	35022.0	480.9	95.259	35024.0	480.9	95.268	35022.0	480.8	95.273	35019.0	480.9	95.267
100%	Vmax	47535.0	480.7	94.955	47538.0	480.7	94.968	47531.0	480.7	94.956	47537.0	480.7	94.954	47537.0	480.7	94.953