Manufacturer: Satcon Technology Corporation

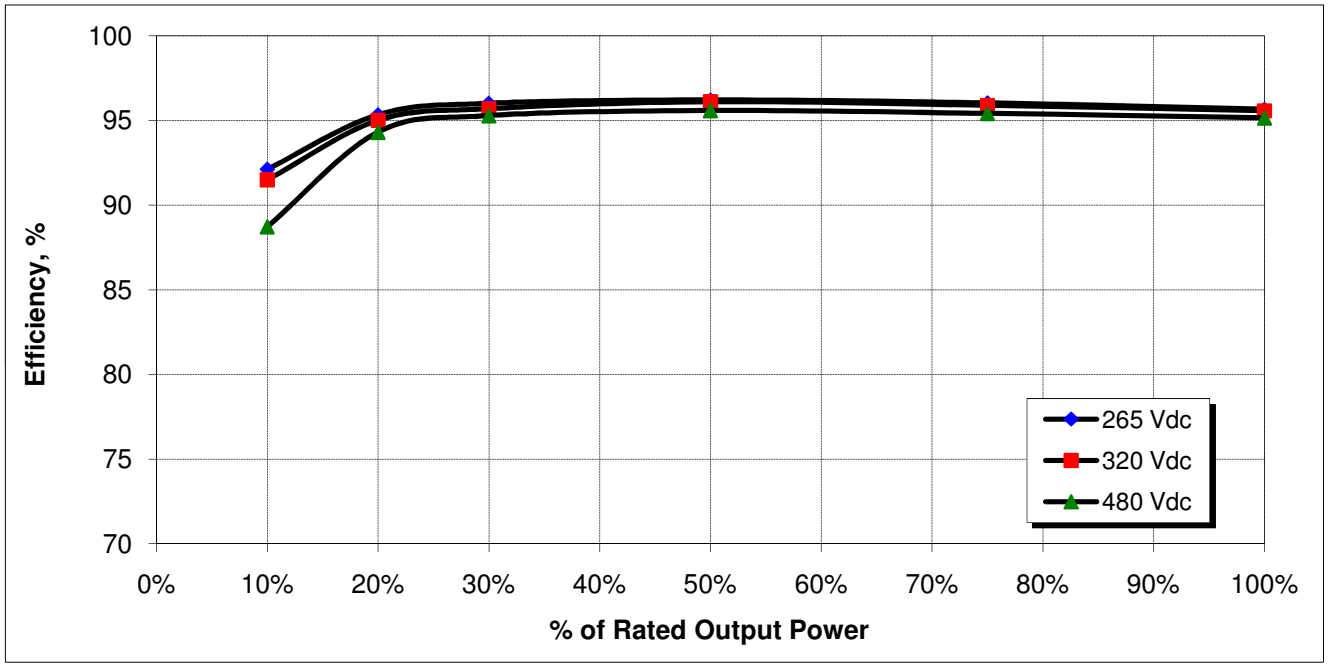
Model #: PowerGate Plus® Model PV-50-S-MT (480Vac)

Rated Maximum Continuous Output Power @25°C: 50.0 kW Night Tare Loss: 78 W
Rated Maximum Continuous Output Power @40°C: 50.0 kW Night Tare Loss: 78 W

Vmin: 265 Vdc Vnom: 320 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	265	92.1	95.3	96.0	96.2	96.0	95.7	95.9
Vnom	320	91.5	95.0	95.7	96.1	95.9	95.6	95.7
Vmax	480	88.7	94.3	95.3	95.6	95.4	95.2	95.1

CEC Efficiency = 95.5%



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	4849.41	265.44	92.18	4851.59	265.45	92.18	4853.59	265.45	92.10	4853.26	265.44	92.10	4852.40	265.43	92.03
20%	Vmin	10775.23	264.65	95.33	10790.57	265.19	95.30	10789.03	265.21	95.27	10783.27	265.22	95.34	10788.87	265.22	95.31
30%	Vmin	15749.27	265.39	96.06	15750.97	265.39	96.04	15755.93	265.40	96.03	15752.80	265.39	96.01	15750.07	265.39	95.98
50%	Vmin	26647.37	265.74	96.21	26656.33	265.75	96.21	26656.73	265.75	96.22	26655.63	265.76	96.22	26656.77	265.76	96.23
75%	Vmin	37017.87	265.13	95.99	37077.27	265.13	96.12	37085.23	265.13	96.11	37088.67	265.12	96.09	37090.63	265.12	96.07
100%	Vmin	47814.43	266.30	95.39	47876.27	266.30	95.53	47999.20	266.30	95.77	48023.40	266.30	95.81	48026.43	266.30	95.79
10%	Vnom	4849.12	320.42	91.63	4850.60	320.43	91.56	4850.40	320.43	91.51	4853.10	320.44	91.44	4852.12	320.44	91.35
20%	Vnom	10694.77	320.34	94.38	10773.57	320.34	95.03	10791.47	320.34	95.13	10792.33	320.35	95.20	10791.67	320.35	95.16
30%	Vnom	15728.83	321.38	95.70	15742.37	321.38	95.74	15747.20	321.39	95.69	15742.90	321.38	95.75	15742.30	321.38	95.69
50%	Vnom	26645.83	321.87	96.08	26650.47	321.88	96.09	26650.13	321.88	96.12	26650.60	321.88	96.09	26652.97	321.88	96.08
75%	Vnom	37018.63	320.57	95.83	37080.00	320.57	95.97	37078.27	320.57	95.98	37078.20	320.57	95.96	37074.83	320.57	95.94
100%	Vnom	47947.93	320.32	95.61	48017.17	320.31	95.74	48029.63	320.32	95.72	48030.63	320.31	95.70	47903.03	320.32	95.60
10%	Vmax	4855.10	479.60	88.84	4858.38	479.64	88.70	4853.27	479.70	88.66	4851.07	479.69	88.70	4858.77	479.65	88.68
20%	Vmax	10702.47	480.19	93.44	10790.77	480.19	94.36	10807.23	480.19	94.49	10811.27	480.20	94.46	10810.17	480.20	94.48
30%	Vmax	15754.33	479.55	95.28	15755.47	479.55	95.27	15755.53	479.55	95.31	15754.63	479.55	95.30	15759.20	479.56	95.28
50%	Vmax	26587.73	480.07	95.58	26628.50	480.08	95.70	26634.03	480.08	95.66	26634.57	480.10	95.63	26638.40	480.09	95.57
75%	Vmax	36896.53	478.56	95.30	37021.27	478.55	95.58	37039.10	478.55	95.58	37042.37	478.57	95.53	37039.60	478.56	95.50
100%	Vmax	47862.23	480.16	95.28	47920.87	480.15	95.37	47932.50	480.15	95.32	47935.13	480.15	95.23	47671.63	480.16	94.95

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	4848.597	265.43	92.103	4843.72	265.43	92.091									
20%	Vmin	10793.3	265.22	95.370	10793.3	265.22	95.402									
30%	Vmin	15742.17	265.4	95.985	15740.8	265.39	95.992									
50%	Vmin	26659.1	265.76	96.222	26661.5	265.75	96.177									
75%	Vmin	37086.53	265.13	96.040	37018.7	265.13	95.843									
100%	Vmin	48022.97	266.29	95.774	47782.1	266.3	95.618									
10%	Vnom	4852.083	320.43	91.444	4849.9	320.43	91.568									
20%	Vnom	10794.07	320.34	95.071	10797.8	320.34	95.061									
30%	Vnom	15740.93	321.37	95.653	15737.7	321.38	95.635									
50%	Vnom	26660.33	321.87	96.149	26656	321.87	96.113									
75%	Vnom	37079.43	320.57	95.892	36989.6	320.56	95.637									
100%	Vnom	47768.83	320.32	95.322	47816.9	320.31	95.288									
10%	Vmax	4863.217	479.57	88.644	4867.24	479.56	88.763									
20%	Vmax	10809.5	480.21	94.486	10812.1	480.11	94.381									
30%	Vmax	15759	479.56	95.239	15755.8	479.55	95.281									
50%	Vmax	26639.23	480.08	95.524	26629.1	480.09	95.449									
75%	Vmax	36997.9	478.57	95.372	36856.9	478.57	95.035									
100%	Vmax	47715.63	480.16	94.918	47721.6	480.16	94.995									