Manufacturer: Satcon Technology Corporation

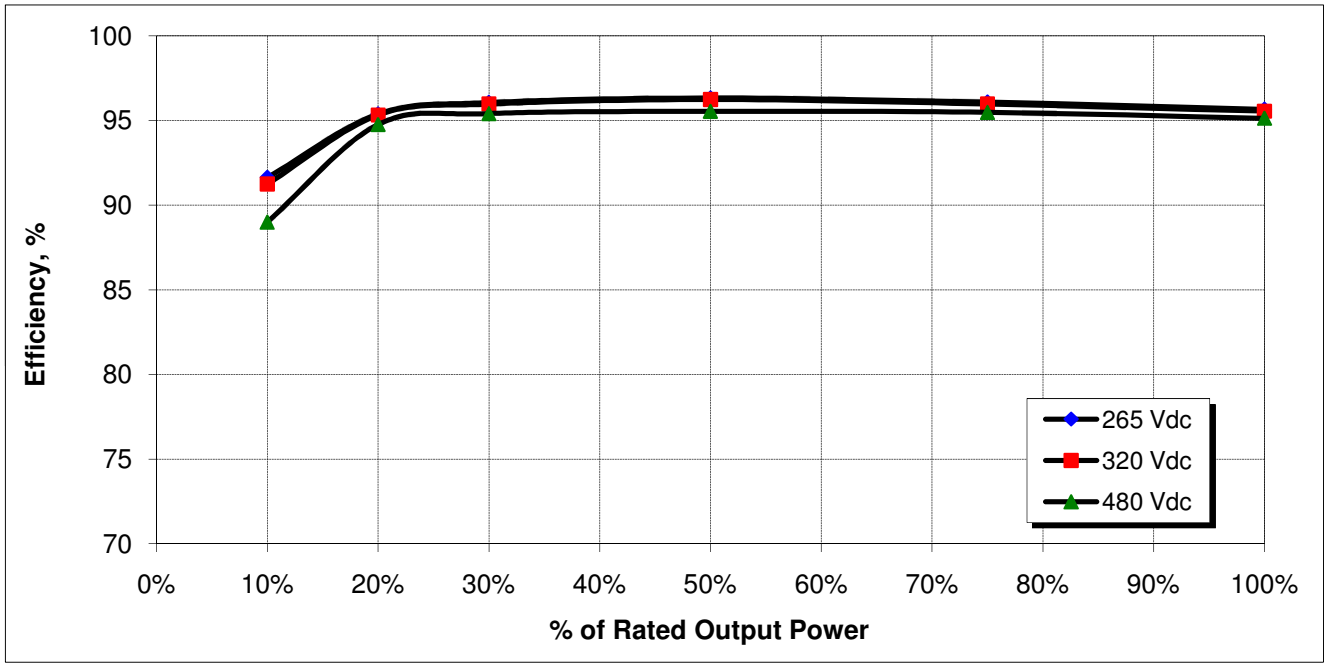
Model #: PowerGate Plus® Model PV-50-S-MT (208Vac)

Rated Maximum Continuous Output Power @25°C: 50.0 kW Night Tare Loss: 81 W
Rated Maximum Continuous Output Power @40°C: 50.0 kW Night Tare Loss: 81 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	91.6	95.4	96.1	96.3	96.1	95.7	95.9
Vnom	320	91.3	95.3	96.0	96.2	96.0	95.6	95.8
Vmax	480	89.0	94.8	95.4	95.5	95.5	95.1	95.2

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	4494.01	266.19	91.50	4496.42	266.20	91.55	4498.08	266.20	91.61	4498.82	266.20	91.61	4498.47	266.19	91.74
20%	Vmin	10605.90	267.22	95.33	10607.63	267.21	95.36	10609.17	267.22	95.37	10613.63	267.23	95.39	10616.93	267.23	95.44
30%	Vmin	15190.47	268.26	96.08	15195.80	268.26	96.11	15191.40	268.26	96.08	15191.70	268.27	96.06	15192.80	268.27	96.04
50%	Vmin	25395.77	266.69	96.39	25395.93	266.69	96.37	25393.70	266.70	96.37	25396.63	266.70	96.34	25397.40	266.69	96.33
75%	Vmin	37589.20	267.55	96.00	37652.83	267.55	96.16	37663.67	267.54	96.17	37666.47	267.55	96.16	37664.20	267.55	96.11
100%	Vmin	47820.40	268.45	95.76	47868.17	268.46	95.82	47873.63	268.46	95.80	47873.50	268.47	95.76	47847.77	268.47	95.68
10%	Vnom	4488.81	319.98	91.11	4487.74	319.98	91.13	4488.72	319.98	91.18	4491.84	319.98	91.21	4493.64	319.98	91.28
20%	Vnom	10606.03	320.32	95.30	10608.10	320.32	95.35	10608.20	320.32	95.29	10609.30	320.32	95.32	10610.70	320.33	95.30
30%	Vnom	15200.83	321.10	96.01	15199.30	321.09	96.00	15199.83	321.09	95.99	15197.07	321.09	95.97	15197.00	321.09	95.93
50%	Vnom	25387.20	320.50	96.27	25388.97	320.49	96.27	25389.93	320.49	96.26	25390.20	320.49	96.21	25389.90	320.50	96.24
75%	Vnom	36812.17	320.47	96.02	37131.60	320.46	96.10	37573.47	320.45	96.08	37642.77	320.45	96.05	37650.50	320.45	96.01
100%	Vnom	47807.87	322.26	95.69	47851.40	322.26	95.73	47859.27	322.26	95.72	47865.13	322.26	95.68	47776.40	322.25	95.45
10%	Vmax	4507.48	477.25	88.74	4507.10	477.25	89.00	4508.07	477.27	89.18	4509.24	477.28	89.14	4510.75	477.28	89.00
20%	Vmax	10632.27	479.42	94.90	10631.23	479.42	94.84	10630.67	479.42	94.79	10633.43	479.43	94.69	10635.03	479.44	94.67
30%	Vmax	15212.33	480.13	95.54	15214.30	480.09	95.47	15214.87	480.04	95.52	15213.83	479.92	95.44	15209.93	479.93	95.36
50%	Vmax	25386.23	479.06	95.88	25245.30	479.07	95.32	25192.83	479.10	95.18	25184.70	479.08	95.19	25260.17	479.02	95.49
75%	Vmax	38057.53	479.69	95.61	38112.10	479.69	95.67	38116.50	479.68	95.66	38119.33	479.68	95.64	38085.97	479.69	95.52
100%	Vmax	47628.67	480.82	95.03	47766.33	480.82	95.31	47795.17	480.82	95.34	47793.47	480.87	95.29	47738.60	480.90	95.14

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	4497.603	266.18	91.726	4495.64	266.19	91.710									
20%	Vmin	10617.23	267.23	95.436	10616.6	267.24	95.356									
30%	Vmin	15191.73	268.28	96.020	15193	268.28	96.043									
50%	Vmin	25396.37	266.69	96.287	25390.6	266.69	96.254									
75%	Vmin	37665.67	267.55	96.090	37604.5	267.54	95.906									
100%	Vmin	47702.77	268.47	95.413	47678.3	268.47	95.409									
10%	Vnom	4495.787	319.98	91.368	4495.81	319.98	91.488									
20%	Vnom	10610.93	320.32	95.331	10609.9	320.33	95.357									
30%	Vnom	15197.1	321.09	95.926	15194.2	321.08	95.944									
50%	Vnom	25387.73	320.48	96.214	25386.2	320.47	96.197									
75%	Vnom	37640.1	320.48	95.964	37490.8	320.48	95.598									
100%	Vnom	47671.6	322.25	95.272	47652.8	322.25	95.318									
10%	Vmax	4511.287	477.27	88.981	4511.64	477.29	88.987									
20%	Vmax	10631.73	479.44	94.745	10630.5	479.45	94.682									
30%	Vmax	15214.2	479.93	95.279	15215.5	479.92	95.247									
50%	Vmax	25370.53	479.01	95.893	25388.4	479.02	95.878									
75%	Vmax	37945.5	479.68	95.144	37916.7	479.68	95.142									
100%	Vmax	47626.93	480.86	94.888	47604.6	480.92	94.948									