Manufacturer: Satcon Technology Corporation

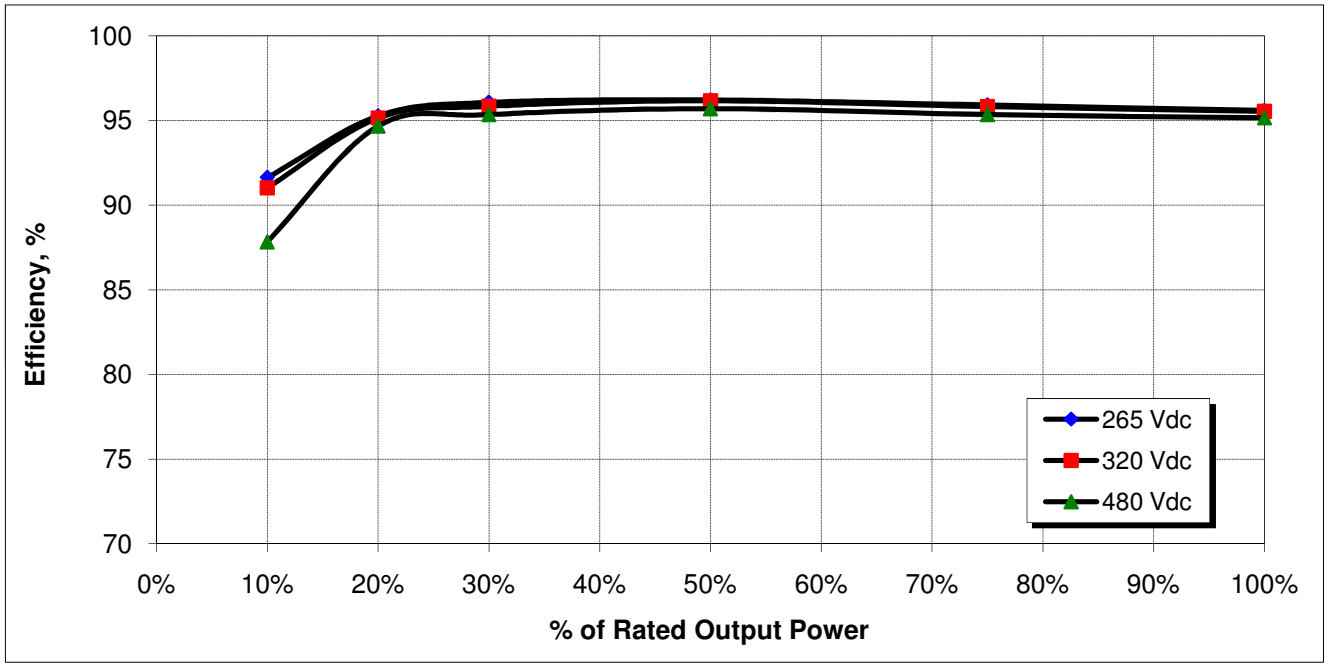
Model #: PowerGate Plus® Model PV-50-S-MT (240Vac)

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	91.6	95.3	96.1	96.2	95.9	95.6	95.8
Vnom	320	91.0	95.1	95.8	96.2	95.8	95.5	95.7
Vmax	480	87.8	94.7	95.3	95.7	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	4473.04	266.81	91.64	4472.98	266.70	91.64	4473.14	266.69	91.66	4476.20	266.68	91.60	4476.56	266.69	91.65
20%	Vmin	10558.83	265.70	95.28	10557.13	265.70	95.21	10545.20	265.71	95.24	10546.33	265.71	95.30	10549.77	265.71	95.25
30%	Vmin	16151.10	266.01	96.05	16152.43	266.01	96.09	16151.03	266.01	96.08	16150.33	266.01	96.06	16151.83	266.01	96.07
50%	Vmin	22722.37	266.69	96.17	22746.33	266.70	96.25	22749.00	266.69	96.24	22752.63	266.69	96.21	22757.03	266.69	96.21
75%	Vmin	35829.10	264.71	95.69	35789.63	264.72	95.62	35780.33	264.72	95.62	35898.80	264.72	95.95	35964.50	264.72	96.15
100%	Vmin	48078.47	266.39	95.59	48159.07	266.39	95.75	48171.87	266.39	95.74	48172.97	266.39	95.73	48111.53	266.40	95.67
10%	Vnom	4480.22	320.67	90.90	4481.45	320.66	91.02	4480.05	320.67	91.06	4479.01	320.66	90.98	4480.60	320.66	91.05
20%	Vnom	10559.60	321.95	95.13	10556.10	321.96	95.16	10556.47	321.96	95.20	10555.57	321.96	95.11	10555.47	321.96	95.08
30%	Vnom	16142.23	322.10	95.87	16142.90	322.37	95.87	16145.07	322.41	95.87	16142.37	322.41	95.87	16144.83	322.41	95.83
50%	Vnom	25266.90	318.64	96.23	25273.27	319.35	96.23	25272.43	319.45	96.19	25271.97	319.46	96.16	25271.40	319.47	96.13
75%	Vnom	36464.47	322.25	95.98	36478.53	323.05	96.00	36479.13	320.53	95.98	36478.77	320.05	95.93	36476.53	319.98	95.90
100%	Vnom	47974.10	320.17	95.31	47972.63	320.23	95.34	48041.17	320.26	95.49	48149.13	320.28	95.70	48166.83	320.28	95.71
10%	Vmax	4496.36	478.30	87.89	4494.67	478.30	87.81	4498.82	478.30	87.70	4497.61	478.30	87.71	4492.08	478.30	87.70
20%	Vmax	10561.93	480.19	94.66	10563.20	480.19	94.77	10568.17	480.20	94.66	10569.87	480.21	94.69	10577.07	480.20	94.61
30%	Vmax	16146.83	480.64	95.38	16158.87	480.65	95.50	16162.80	480.65	95.42	16162.07	480.65	95.38	16159.83	480.65	95.33
50%	Vmax	25230.97	481.28	95.65	25263.30	481.29	95.79	25270.00	481.29	95.75	25273.07	481.29	95.71	25273.93	481.28	95.67
75%	Vmax	37942.63	481.47	95.52	37945.90	481.47	95.55	38059.10	481.47	95.53	38200.53	481.48	95.51	37825.80	481.48	95.18
100%	Vmax	47882.33	480.35	95.02	47881.50	480.35	95.01	47882.97	480.36	94.99	48018.03	480.37	95.25	48086.30	480.37	95.34

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	4475.09	266.69	91.64	4472.99	266.68	91.61									
20%	Vmin	10549.53	265.71	95.28	10547.70	265.71	95.29									
30%	Vmin	16152.97	266.01	96.07	16150.30	266.01	96.07									
50%	Vmin	22757.97	266.69	96.19	22759.20	266.69	96.22									
75%	Vmin	35974.23	264.72	96.17	35979.23	264.72	96.17									
100%	Vmin	47978.17	266.40	95.36	47981.57	266.41	95.32									
10%	Vnom	4479.34	320.67	91.12	4477.59	320.66	91.05									
20%	Vnom	10552.33	321.96	95.19	10554.07	321.96	95.18									
30%	Vnom	16141.30	322.40	95.82	16143.50	322.40	95.79									
50%	Vnom	25271.20	319.47	96.13	25270.70	319.48	96.12									
75%	Vnom	36342.87	319.98	95.55	36284.20	319.98	95.46									
100%	Vnom	48170.67	320.28	95.67	48104.80	320.29	95.58									
10%	Vmax	4489.75	478.31	87.85	4500.25	478.31	88.15									
20%	Vmax	10572.53	480.20	94.65	10573.30	480.22	94.64									
30%	Vmax	16158.97	480.65	95.25	16158.93	480.65	95.18									
50%	Vmax	25276.63	481.28	95.68	25276.93	481.29	95.66									
75%	Vmax	37393.00	481.49	95.07	37262.17	481.50	95.12									
100%	Vmax	48091.80	480.36	95.28	48032.13	480.36	95.20									