Manufacturer: INGETEAM ENERGY SA

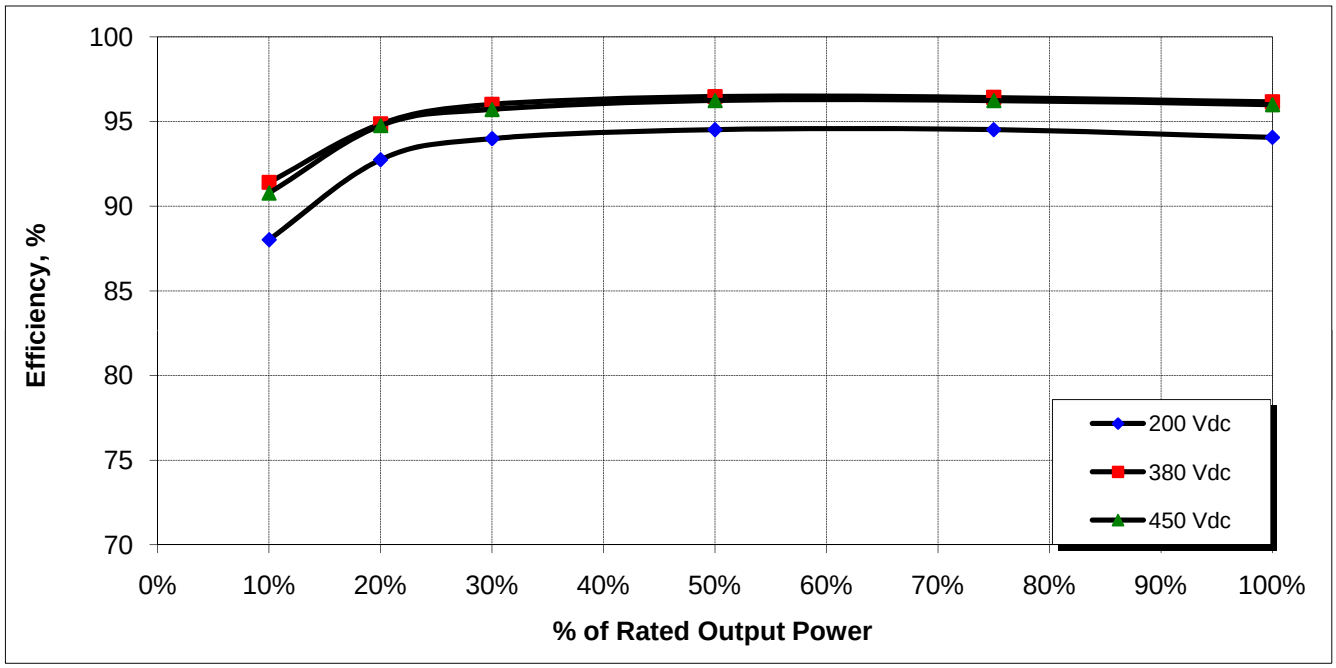
Model #: Ingecon Sun 5U (277V)

Rated Maximum Continuous Output Power: 5.00 kW Night Tare Loss: 0.50 W

Vmin: 200 Vdc Vnom: 380 Vdc Vmax: 450 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.50	1.00	1.50	2.50	3.75	5.00	Wtd
Vmin	200	88.0	92.7	94.0	94.5	94.5	94.1	94.1
Vnom	380	91.4	94.9	96.0	96.5	96.4	96.2	96.1
Vmax	450	90.8	94.8	95.7	96.2	96.2	96.0	95.9

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)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	0.4789	199.91	88.026	0.475	199.76	88.038	0.471	199.8	88.028	0.458	200.06	88.007	0.446	200.38	87.863
20%	Vmin	1.0283	199.66	92.726	1.031	199.68	92.817	1.039	199.66	92.688	1.048	199.71	92.740	1.053	199.6	92.639
30%	Vmin	1.5862	199.93	93.857	1.591	199.89	93.924	1.589	199.9	94.029	1.583	200.04	94.093	1.568	200.16	94.155
50%	Vmin	2.4278	199.44	94.503	2.426	199.51	94.547	2.417	199.47	94.610	2.404	199.26	94.616	2.42	199.26	94.586
75%	Vmin	2.4278	199.44	94.503	2.426	199.51	94.547	2.417	199.47	94.610	2.404	199.26	94.616	2.42	199.26	94.586
100%	Vmin	4.8174	199.75	94.008	4.834	199.19	93.985	4.81	199.84	94.095	4.788	200.04	94.107	4.793	200.23	94.185
10%	Vnom	0.4736	379.32	91.545	0.474	379.06	91.523	0.473	379.11	91.451	0.473	379.46	91.401	0.475	380.58	91.048
20%	Vnom	1.0712	379.63	95.320	1.073	379.86	95.300	1.072	379.82	91.401	1.073	379.86	95.235	1.079	380.6	95.145
30%	Vnom	1.6076	380.25	96.049	1.608	380.6	95.904	1.603	380.61	95.882	1.606	380.23	95.930	1.608	380.21	96.048
50%	Vnom	2.7205	380.6	96.471	2.727	380.92	96.425	2.735	381.05	96.333	2.73	380.82	96.438	2.719	380.93	96.543
75%	Vnom	3.5737	379.58	96.414	3.564	379.89	96.517	3.563	379.73	96.520	3.563	380.06	96.509	3.564	380.22	96.489
100%	Vnom	4.7785	380.88	96.131	4.792	380.98	96.041	4.786	381.52	96.094	4.771	381.39	96.175	4.758	380.94	96.233
10%	Vmax	0.4875	450.34	90.855	0.487	450.54	90.845	0.486	450.5	90.777	0.486	450.62	90.743	0.487	450.33	90.784
20%	Vmax	1.0822	450.86	94.747	1.083	450.81	94.743	1.083	450.66	94.756	1.082	449.85	94.759	1.081	449.9	94.775
30%	Vmax	1.6157	450.36	95.724	1.62	450.54	95.723	1.618	450.29	95.712	1.617	-95.712	95.712	1.616	450.21	95.706
50%	Vmax	2.6735	449.41	96.246	2.679	449.59	96.237	2.674	450.52	96.228	2.676	451.03	96.244	2.679	450.62	96.246
75%	Vmax	3.5399	449.59	96.238	3.538	449.58	96.237	3.541	449.55	96.229	3.541	449.6	96.251	3.541	450.3	96.240
100%	Vmax	4.8024	449.58	96.002	4.801	450.84	96.003	4.802	450.97	95.997	4.802	450.75	96.004	4.802	450.42	95.994

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)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	0.4621	200.15	87.983	0.475	200.08	88.077	0.478	200.03	88.083	0.481	199.74	87.957	0.479	199.55	88.030
20%	Vmin	1.048	199.46	92.762	1.042	199.28	92.789	1.029	199.4	92.734	1.033	199.42	92.744	1.031	199.82	92.746
30%	Vmin	1.5739	200.11	94.091	1.587	199.9	94.046	1.591	199.87	93.955	1.587	199.96	93.870	1.59	199.88	93.884
50%	Vmin	2.4258	199.28	94.494	2.43	199.43	94.475	2.435	199.36	94.406	2.434	199.37	94.473	2.428	199.44	94.554
75%	Vmin	2.4258	199.28	94.494	2.43	199.43	94.475	2.435	199.36	94.406	2.434	199.37	94.473	2.428	199.44	94.554
100%	Vmin	4.8045	199.69	94.093	4.786	199.94	94.085	4.805	199.76	94.103	4.825	199.3	94.016	4.831	199.52	93.927
10%	Vnom	0.4776	380.34	91.341	0.473	379.49	91.395	0.474	378.9	91.424	0.474	378.48	91.494	0.472	378.49	91.477
20%	Vnom	1.082	380.88	95.075	1.078	380	95.208	1.069	379.36	95.316	1.071	379.63	95.304	1.071	379.42	95.309
30%	Vnom	1.6056	380.05	96.095	1.605	380.2	96.128	1.604	379.8	96.122	1.606	380	96.043	1.607	380.41	95.986
50%	Vnom	2.7156	381.16	96.558	2.715	380.87	96.556	2.719	381.08	96.561	2.722	381.29	96.502	2.73	381.72	96.384
75%	Vnom	3.5828	380.31	96.399	3.586	380.2	96.320	3.59	380.45	96.308	3.584	379.86	96.357	3.571	379.76	96.479
100%	Vnom	4.7602	381.05	96.229	4.76	381.32	96.236	4.76	381.44	96.234	4.771	381.39	96.158	4.788	381.58	96.056
10%	Vmax	0.487	450.45	90.740	0.487	450.8	90.736	0.487	450.67	90.763	0.488	451.02	90.756	0.487	451.4	90.762
20%	Vmax	1.0816	449.98	94.730	1.083	450.28	94.764	1.081	450.49	94.769	1.081	450.86	94.772	1.081	450.28	94.728
30%	Vmax	1.6152	449.71	95.716	1.616	449.55	95.720	1.616	449.69	95.730	1.618	449.64	95.701	1.615	449.65	95.712
50%	Vmax	2.6746	450.47	96.247	2.678	450.54	96.236	2.677	450.81	96.243	2.676	450.6	96.243	2.676	450.6	96.250
75%	Vmax	3.5393	450.16	96.239	3.54	450.05	96.243	3.541	450.22	96.238	3.537	450.28	96.232	3.54	449.98	96.250
100%	Vmax	4.8014	450.07	96.001	4.8	450.3	95.990	4.804	450.79	95.992	4.803	450.81	95.999	4.8	451.17	95.985