Manufacturer: Power-One, Inc.

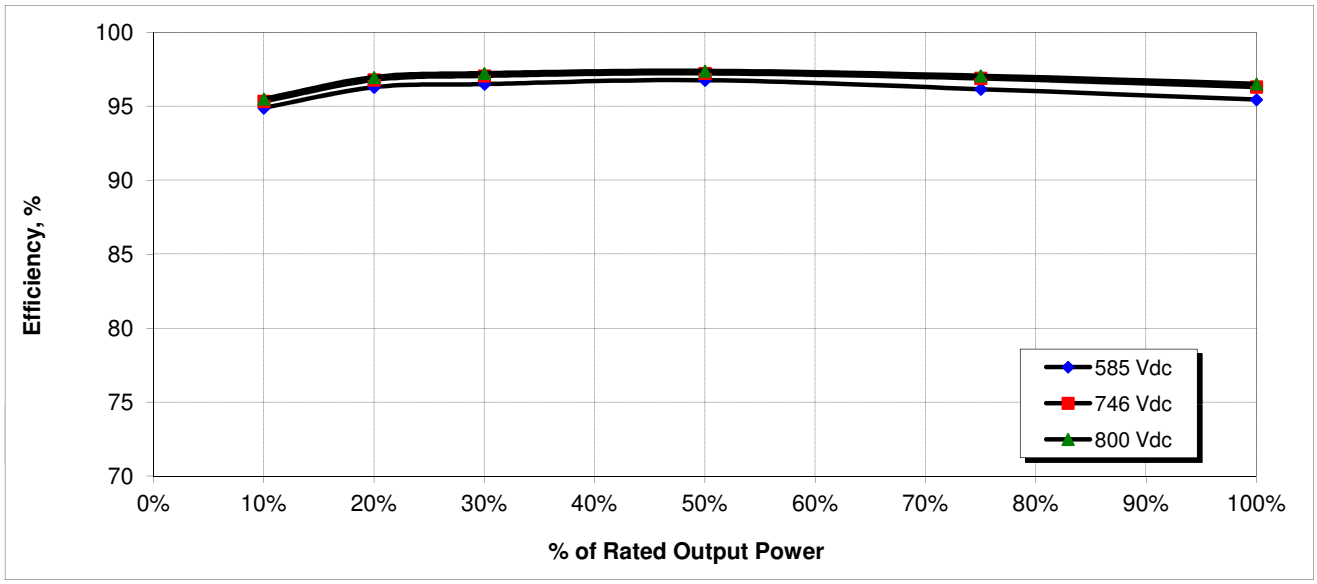
Model #: ULTRA-1500-TL-OUTD-1-US

Rated Maximum Continuous Output Power: 1560.00 kW Night Tare Loss: 374 W

Vmin: 585 Vdc Vnom: 746 Vdc Vmax: 800 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		156.00	312.00	468.00	780.00	1170.00	1560.00	Wtd
Vmin	585	94.88	96.28	96.49	96.76	96.15	95.45	96.24
Vnom	746	95.33	96.78	97.06	97.23	96.89	96.31	96.88
Vmax	800	95.49	96.95	97.22	97.38	97.05	96.51	97.05

CEC Efficiency of Inverter and MV TP1 Transformer = 96.5%



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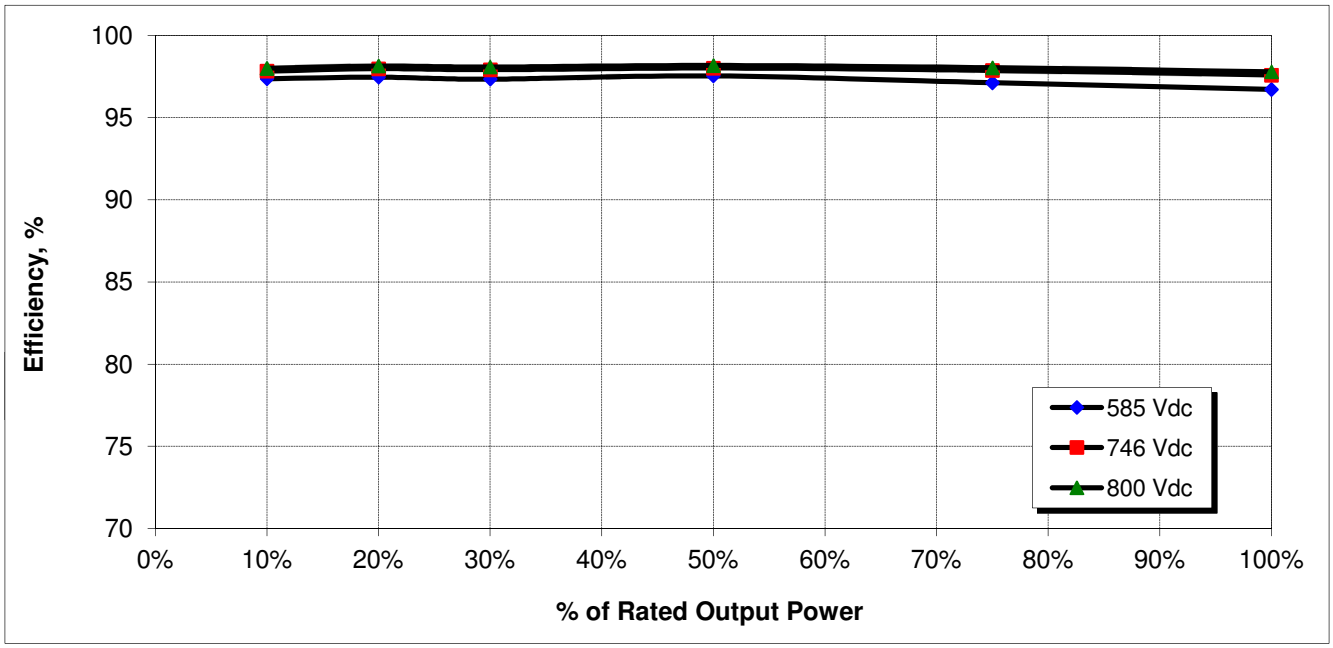
		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		156.00	312.00	468.00	780.00	1170.00	1560.00	Wtd
Vmin	585	97.36	97.46	97.34	97.54	97.12	96.71	97.24
Vnom	746	97.83	97.97	97.91	98.01	97.87	97.59	97.89
Vmax	800	97.99	98.14	98.08	98.17	98.03	97.79	98.06

Inverter Efficiency only = 97.5%



1560kVA TP1 Transformer Efficiency

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		156.00	312.00	468.00	780.00	1170.00	1560.00	Wtd
Vmin	585	97.45	98.79	99.13	99.20	99.00	98.69	98.97
Vnom	746	97.45	98.79	99.13	99.20	99.00	98.69	98.97
Vmax	800	97.45	98.79	99.13	99.20	99.00	98.69	98.97

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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	155819.9	585.5	97.4	155795.1	585.3	97.4	155805.5	585.4	97.4	155804.6	585.5	97.4	155801.0	585.4	97.4
20%	Vmin	342829.3	585.6	97.5	342865.4	585.6	97.5	342857.4	585.2	97.5	342840.7	585.3	97.5	342805.5	585.7	97.5
30%	Vmin	431068.0	585.3	97.3	431085.6	585.6	97.3	431070.2	585.6	97.3	431090.5	585.4	97.3	431082.8	585.5	97.3
50%	Vmin	702962.8	585.0	97.5	702994.2	585.2	97.5	702981.4	585.6	97.5	702944.3	585.1	97.5	702927.7	585.3	97.5
75%	Vmin	1098968.0	585.6	97.1	1098963.4	585.7	97.1	1098895.4	585.8	97.1	1098990.8	585.8	97.1	1098974.8	585.0	97.1
100%	Vmin	1482911.7	585.9	96.7	1482927.2	585.5	96.7	1483007.6	585.3	96.7	1482991.6	585.3	96.7	1483098.5	585.6	96.7
10%	Vnom	155581.6	745.8	97.8	155620.5	745.3	97.8	155583.0	744.9	97.8	155605.2	745.1	97.8	155624.7	745.3	97.8
20%	Vnom	342758.5	745.3	98.0	342731.4	745.6	98.0	342699.4	745.3	98.0	342733.4	745.3	98.0	342741.0	745.7	98.0
30%	Vnom	429488.5	745.4	97.9	429437.3	745.5	97.9	429418.8	745.8	97.9	429438.0	745.8	97.9	429454.2	745.5	97.9
50%	Vnom	857477.2	744.4	98.0	857408.9	745.1	98.0	857428.5	745.0	98.0	857368.0	744.7	98.0	857334.9	744.3	98.0
75%	Vnom	1109666.4	745.0	97.9	1109632.1	745.2	97.9	1109670.4	745.2	97.9	1109598.5	744.9	97.9	1109622.8	745.0	97.9
100%	Vnom	1483422.7	745.3	97.6	1483214.8	745.5	97.6	1483313.8	745.5	97.6	1483369.2	745.4	97.6	1483290.9	744.6	97.6
10%	Vmax	155807.8	800.8	98.0	155840.6	801.8	98.0	155796.9	800.5	98.0	155818.4	800.7	98.0	155812.3	801.1	98.0
20%	Vmax	342892.3	799.0	98.1	342899.2	801.1	98.1	342881.9	801.7	98.1	342889.1	801.3	98.1	342906.7	800.7	98.1
30%	Vmax	429569.6	801.5	98.1	429641.4	801.5	98.1	429639.9	801.4	98.1	429634.4	801.8	98.1	429648.6	802.7	98.1
50%	Vmax	857173.7	799.9	98.2	857162.2	800.7	98.2	857186.2	799.7	98.1	857102.2	800.2	98.2	857154.0	800.5	98.2
75%	Vmax	1109783.3	800.0	98.0	1109707.4	800.4	98.0	1109660.1	800.8	98.0	1109577.9	800.9	98.0	1109565.4	800.7	98.0
100%	Vmax	1483184.6	799.7	97.8	1483302.2	801.1	97.8	1483429.7	802.4	97.8	1483342.8	800.5	97.8	1483430.6	800.4	97.8

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	155824.9	585.5	97.4	155804.9	585.5	97.3									
20%	Vmin	342852.2	585.5	97.5	342856.4	585.4	97.5									
30%	Vmin	431103.5	585.5	97.3	431102.6	585.5	97.3									
50%	Vmin	703021.3	585.3	97.5	702988.6	585.5	97.5									
75%	Vmin	1098939.1	585.1	97.1	1098938.8	585.4	97.1									
100%	Vmin	1483029.2	585.9	96.7	1483004.7	585.5	96.7									
10%	Vnom	155593.7	744.9	97.8	155623.9	745.3	97.8									
20%	Vnom	342770.7	745.3	98.0	342731.4	745.1	98.0									
30%	Vnom	429492.0	745.4	97.9	429456.0	745.7	97.9									
50%	Vnom	857434.6	746.3	98.0	857326.4	744.5	98.0									
75%	Vnom	1109698.4	745.3	97.9	1109760.3	745.4	97.9									
100%	Vnom	1483416.5	745.0	97.6	1483311.5	745.4	97.6									
10%	Vmax	155813.6	801.3	98.0	155773.7	801.1	98.0									
20%	Vmax	342939.4	801.2	98.1	342925.7	801.0	98.1									
30%	Vmax	429636.1	801.8	98.1	429633.7	800.8	98.1									
50%	Vmax	857106.7	799.5	98.2	857224.1	800.0	98.2									
75%	Vmax	1109570.5	800.7	98.0	1109727.8	800.6	98.0									
100%	Vmax	1483501.0	799.8	97.8	1483514.2	800.0	97.8									