Manufacturer: Power-One, Inc.

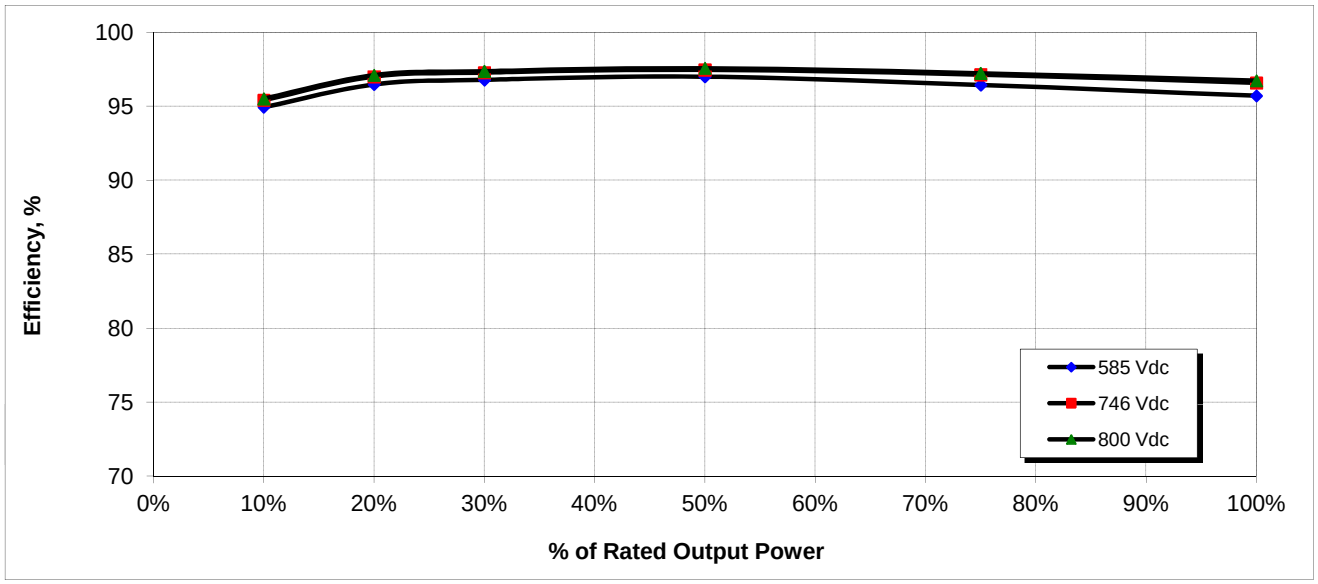
Model #: ULTRA-1500-TL-OUTD-3-US

Rated Maximum Continuous Output Power: 1560.00 kW Night Tare Loss: 430 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	94.93	96.47	96.78	96.99	96.44	95.70	96.50
Vnom	746	95.40	97.00	97.26	97.45	97.13	96.57	97.11
Vmax	800	95.51	97.10	97.37	97.57	97.23	96.72	97.22

CEC Efficiency of Inverter and MV TP1 Transformer = 97.0%



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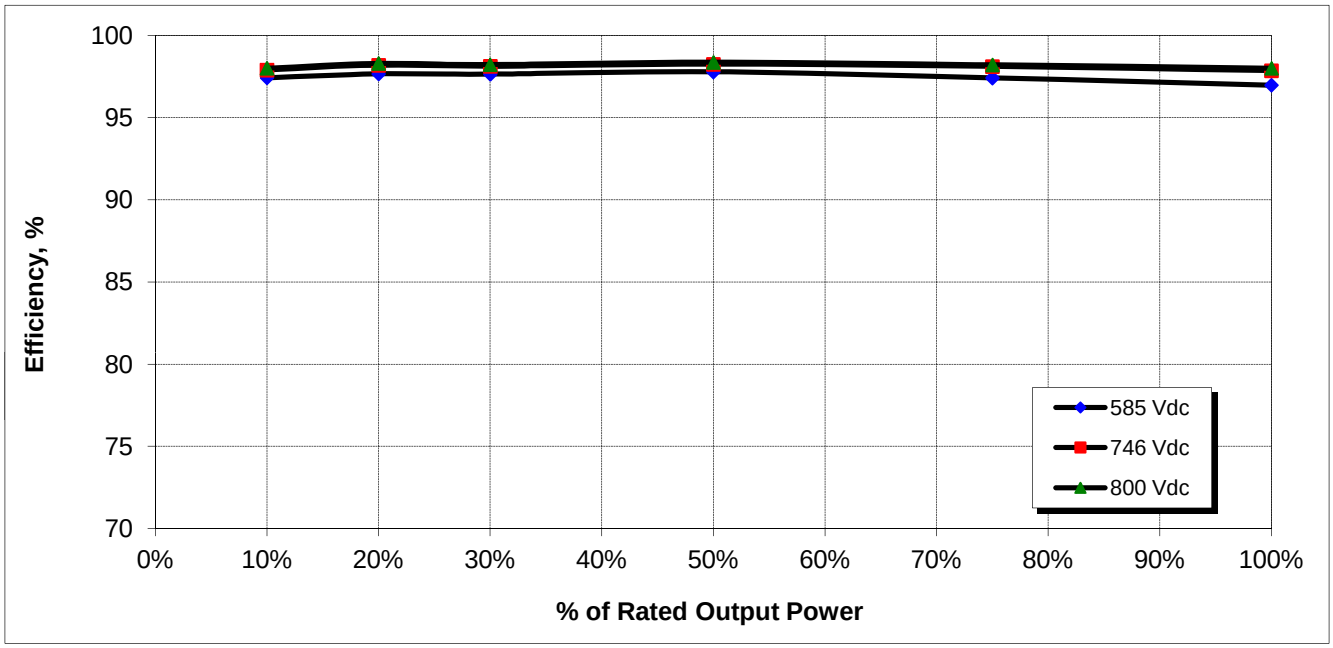
		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		156.00	312.00	468.00	780.00	1170.00	1560.00	Wtd
Vmin	585	97.42	97.65	97.63	97.78	97.41	96.97	97.50
Vnom	746	97.90	98.18	98.12	98.24	98.11	97.85	98.12
Vmax	800	98.01	98.29	98.22	98.36	98.21	98.00	98.23

Inverter Efficiency only = 98.0%



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	150563.9	585.3	97.4	150559.3	585.5	97.4	150558.0	585.5	97.4	150546.5	585.7	97.4	150557.9	585.3	97.4
20%	Vmin	285748.6	585.6	97.7	285740.7	585.7	97.7	285746.0	585.3	97.6	285739.2	585.2	97.7	285738.7	585.3	97.7
30%	Vmin	433546.0	585.4	97.6	433588.0	585.1	97.6	433610.9	585.3	97.6	433630.8	585.7	97.6	433539.7	585.2	97.6
50%	Vmin	709089.2	585.4	97.8	709499.4	585.2	97.8	709356.6	585.3	97.8	709540.2	585.7	97.8	709369.7	585.1	97.8
75%	Vmin	1096368.2	585.4	97.4	1096322.5	585.3	97.4	1096446.7	585.6	97.4	1096415.4	585.9	97.4	1096323.4	585.6	97.4
100%	Vmin	1482364.0	585.3	96.9	1482620.9	585.5	97.0	1482661.1	585.3	97.0	1482660.0	585.3	97.0	1483052.6	585.2	97.0
10%	Vnom	151195.3	745.7	97.9	151207.5	745.5	97.9	151194.4	745.6	97.9	151192.7	745.1	97.9	151181.0	744.9	97.9
20%	Vnom	333551.8	745.7	98.2	333646.7	744.5	98.2	333635.0	745.4	98.2	333591.2	745.3	98.2	333541.7	745.5	98.2
30%	Vnom	433974.2	744.5	98.1	433930.9	744.6	98.1	433977.6	744.9	98.1	434032.6	745.0	98.1	433956.7	745.1	98.1
50%	Vnom	707719.4	744.9	98.3	707807.3	744.9	98.3	707780.3	744.6	98.3	707834.6	744.5	98.2	707584.0	745.1	98.2
75%	Vnom	1099499.1	744.4	98.1	1099660.5	744.6	98.1	1099611.7	745.2	98.1	1099699.4	745.5	98.1	1099794.4	745.4	98.1
100%	Vnom	1488800.0	745.2	97.9	1488916.4	745.1	97.9	1488830.2	745.3	97.9	1488813.6	745.2	97.9	1488787.6	745.2	97.9
10%	Vmax	151399.1	800.6	98.0	151394.6	800.5	98.0	151358.7	800.2	98.0	151033.2	799.4	98.0	151179.0	800.2	98.0
20%	Vmax	333777.6	800.1	98.3	333833.0	800.5	98.3	333722.3	800.6	98.3	333815.4	800.9	98.3	333814.7	800.7	98.3
30%	Vmax	434169.2	802.1	98.2	434245.0	800.3	98.3	434125.0	800.0	98.2	434261.1	800.3	98.2	434123.3	800.0	98.2
50%	Vmax	707461.7	801.2	98.4	707551.5	800.8	98.4	707463.9	800.1	98.4	707538.4	800.3	98.4	707394.3	801.1	98.4
75%	Vmax	1099769.6	802.5	98.2	1100018.5	802.7	98.2	1099898.2	802.6	98.2	1099675.2	800.6	98.2	1099645.5	800.0	98.2
100%	Vmax	1505194.4	803.5	98.0	1505302.4	803.6	98.0	1505303.8	804.0	98.0	1505260.6	803.5	98.0	1505179.3	804.0	98.0

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	150558.2	585.7	97.4	150581.2	585.3	97.4									
20%	Vmin	285705.5	585.1	97.7	285714.4	585.4	97.6									
30%	Vmin	433582.4	585.4	97.6	433454.4	585.4	97.6									
50%	Vmin	709493.3	585.7	97.8	709614.0	585.4	97.8									
75%	Vmin	1096270.8	585.3	97.4	1096377.1	585.3	97.4									
100%	Vmin	1483051.6	585.3	97.0	1482932.8	585.3	97.0									
10%	Vnom	151234.7	744.5	97.9	151235.5	744.9	97.9									
20%	Vnom	333563.0	744.9	98.2	333672.2	745.0	98.2									
30%	Vnom	433925.5	744.7	98.1	433872.7	745.5	98.1									
50%	Vnom	707565.8	744.8	98.2	707741.9	745.0	98.2									
75%	Vnom	1099669.1	745.8	98.1	1099766.0	745.0	98.1									
100%	Vnom	1488988.0	745.0	97.9	1488839.0	745.2	97.9									
10%	Vmax	151260.1	801.1	98.0	151372.5	801.1	98.0									
20%	Vmax	333820.3	801.1	98.3	333916.3	801.7	98.3									
30%	Vmax	434292.0	798.7	98.2	434225.2	799.2	98.2									
50%	Vmax	707376.7	801.0	98.4	707447.5	801.0	98.4									
75%	Vmax	1099705.5	800.1	98.2	1099421.2	800.0	98.2									
100%	Vmax	1505220.1	804.2	98.0	1505180.8	804.2	98.0									