Manufacturer: Enphase Energy

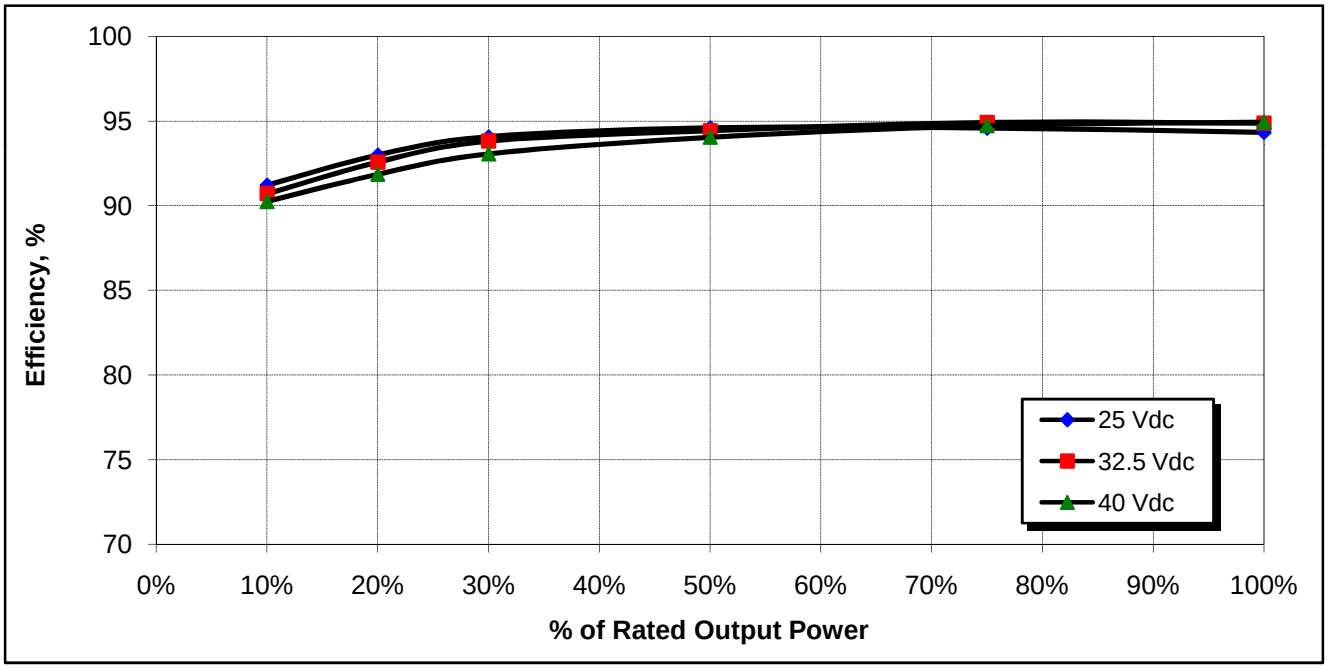
Model #: M175-24-240-S

Rated Maximum Continuous Output Power @25°C: 175.0 W Night Tare Loss: 0.58 W
Rated Maximum Continuous Output Power @40°C: 175.0 W Night Tare Loss: 0.58 W

Vmin: 25 Vdc Vnom: 32.5 Vdc Vmax: 40 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		17.50	35.00	52.50	87.50	131.25	175.00	Wtd
Vmin	25	91.2	93.0	94.1	94.6	94.6	94.3	94.3
Vnom	32.5	90.7	92.6	93.8	94.4	94.9	94.9	94.4
Vmax	40	90.2	91.9	93.1	94.0	94.7	94.9	94.1

CEC Efficiency = 94.5%



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	16.643	24.777	91.219	16.6	27.734	91.269	16.585	29.064	91.174	16.632	23.211	91.196	16.639	24.873	91.236
20%	Vmin	38.038	25.157	93.093	37.44	26.226	93.014	37.447	26.153	92.958	37.451	26.136	92.967	37.462	26.264	92.994
30%	Vmin	55.991	24.756	94.090	56.01	24.763	94.063	55.991	24.48	94.090	55.44	25.438	94.075	55.422	25.447	94.044
50%	Vmin	93.848	26.166	94.590	94.09	26.475	94.596	93.902	26.316	94.610	93.96	26.184	94.599	93.87	25.775	94.612
75%	Vmin	130.54	24.611	94.600	130.5	25.103	94.575	130.54	25.119	94.575	130.57	24.513	94.576	130.57	24.864	94.576
100%	Vmin	166.57	25.143	94.332	166.6	24.819	94.335	166.64	24.691	94.335	166.68	24.929	94.317	166.64	24.776	94.335
10%	Vnom	16.466	34.283	90.449	16.47	30.854	90.556	16.574	31.435	90.827	16.528	31.915	90.749	16.499	32.524	90.788
20%	Vnom	37.642	33.007	92.367	37.87	31.856	92.515	37.886	31.994	92.559	37.598	30.413	92.671	37.609	30.421	92.615
30%	Vnom	55.865	31.609	93.821	55.88	31.933	93.782	55.872	31.872	93.833	55.879	31.81	93.789	55.872	31.713	93.833
50%	Vnom	94.259	32.794	94.421	94.32	32.835	94.445	94.334	33.068	94.429	94.334	32.838	94.429	94.302	32.926	94.430
75%	Vnom	136.69	33.12	94.925	136.7	32.558	94.900	136.73	32.928	94.926	136.58	33.547	94.921	136.58	33.451	94.921
100%	Vnom	167.22	32.999	94.893	167.3	32.51	94.894	167.26	32.054	94.855	167.26	31.767	94.874	167.18	32.347	94.872
10%	Vmax	16.51	38.463	90.045	16.56	40.559	90.322	16.553	38.703	90.122	16.61	40.229	90.294	16.582	38.952	90.331
20%	Vmax	37.642	39.561	91.800	37.64	39.391	91.711	37.71	38.363	91.886	37.678	39.634	91.807	37.728	38.121	91.930
30%	Vmax	55.494	39.238	93.030	55.05	37.454	93.193	55.055	37.573	93.193	54.947	39.312	92.897	55.206	39.395	92.996
50%	Vmax	94.183	39.612	94.040	94.19	39.369	94.044	94.176	39.617	94.067	94.14	39.715	94.031	94.165	39.868	94.056
75%	Vmax	136.76	40.609	94.738	136.7	40.602	94.713	136.76	40.527	94.738	136.73	40.28	94.737	136.73	40.288	94.737
100%	Vmax	178.67	40.735	94.967	178.6	40.744	94.930	178.63	40.723	94.948	178.67	40.429	94.949	178.6	39.988	94.947

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	16.614	24.972	91.206	16.61	28.492	91.240									
20%	Vmin	37.447	26.348	92.958	37.46	26.359	92.994									
30%	Vmin	55.476	24.789	94.078	55.96	24.6	94.098									
50%	Vmin	93.856	25.982	94.597	93.97	25.629	94.610									
75%	Vmin	130.5	25.262	94.598	130.6	25.462	94.601									
100%	Vmin	166.61	25.525	94.314	166.6	25.599	94.314									
10%	Vnom	16.542	31.613	90.810	16.51	34.074	90.810									
20%	Vnom	37.577	30.384	92.618	37.67	30.494	92.675									
30%	Vnom	55.876	31.655	93.782	55.78	31.33	93.846									
50%	Vnom	94.32	32.67	94.448	94.31	32.972	94.438									
75%	Vnom	136.69	33.405	94.925	136.7	33.153	94.900									
100%	Vnom	167.22	32.492	94.893	167.3	33.114	94.855									
10%	Vmax	16.621	41.749	90.317	16.62	39.007	90.264									
20%	Vmax	37.721	38.205	91.912	37.73	38.212	91.930									
30%	Vmax	55.372	39.299	92.937	55.09	37.529	93.191									
50%	Vmax	94.162	39.589	94.052	94.13	39.442	94.050									
75%	Vmax	136.76	40.666	94.738	136.7	40.906	94.737									
100%	Vmax	178.52	40.158	94.927	178.7	40.509	94.949									