Manufacturer: Enphase Energy

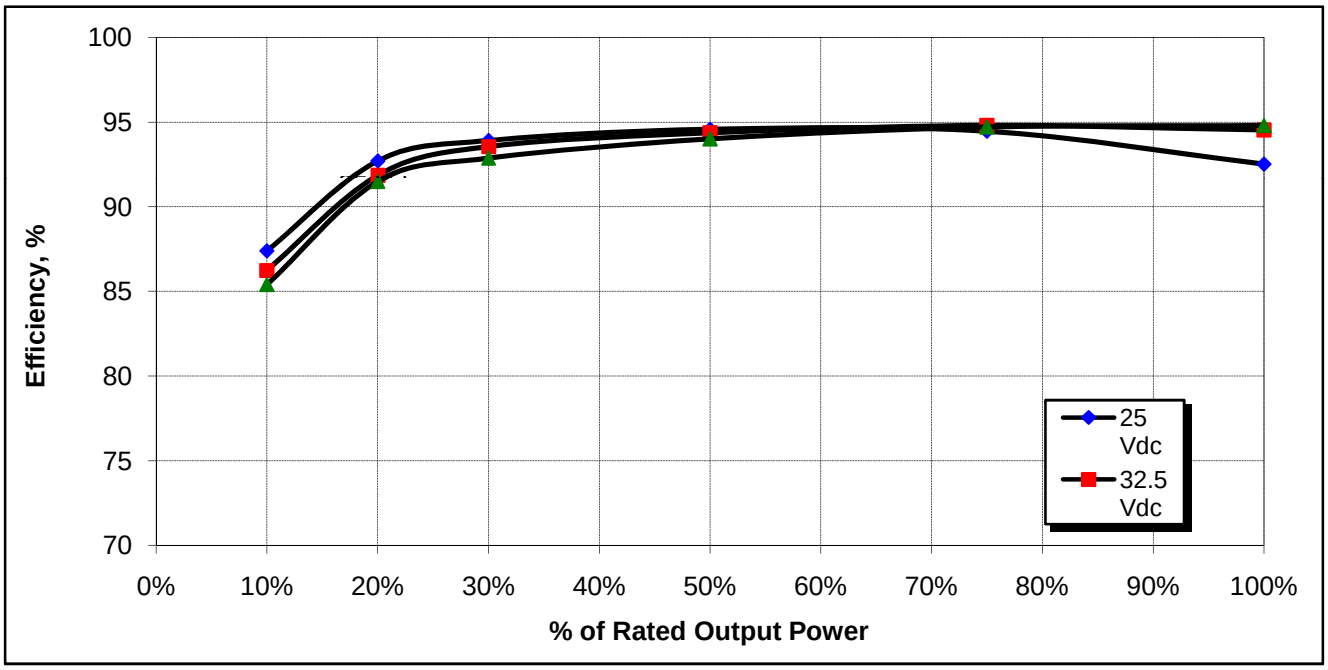
Model #: M175-24-240-S

Rated Maximum Continuous Output Power: 175 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	87.4	92.7	93.9	94.6	94.5	92.5	94.0
Vnom	32.5	86.3	91.8	93.6	94.4	94.8	94.5	94.1
Vmax	40	85.4	91.5	92.9	94.0	94.7	94.8	93.8

CEC Efficiency = 94.0%



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	16.07	25.556	87.446	16.06	25.587	87.372	16.05	25.617	87.341	16.06	25.518	87.408	16.06	25.533	87.395
20%	Vmin	35.887	25.607	92.683	35.89	25.548	92.691	35.9	25.534	92.717	35.9	25.469	92.717	35.89	25.552	92.700
30%	Vmin	53.267	26.187	93.917	53.26	26.236	93.900	53.25	26.221	93.893	53.25	26.205	93.899	53.27	26.19	93.929
50%	Vmin	95.397	25.773	94.580	95.4	25.783	94.577	95.4	25.783	94.577	95.4	25.765	94.593	95.4	25.783	94.580
75%	Vmin	133.47	25.639	94.465	133.5	25.635	94.468	133.5	25.63	94.465	133.5	25.634	94.474	133.5	25.637	94.472
100%	Vmin	173.73	25.809	92.636	173.6	25.824	92.591	173.6	25.808	92.535	173.6	25.812	92.490	173.6	25.815	92.452
10%	Vnom	16.073	32.263	86.277	16.07	32.262	86.272	16.07	32.255	86.283	16.07	32.283	86.216	16.19	32.802	86.164
20%	Vnom	35.79	33.334	91.863	35.79	33.32	91.863	35.79	33.325	91.855	35.78	33.329	91.846	35.78	33.346	91.838
30%	Vnom	54.157	32.619	93.567	54.15	32.645	93.545	54.15	32.633	93.556	54.15	32.621	93.550	54.16	32.469	93.583
50%	Vnom	89.367	32.636	94.362	89.38	32.624	94.375	89.39	32.62	94.386	89.37	32.643	94.372	89.36	32.655	94.368
75%	Vnom	136.4	32.454	94.803	136.4	32.458	94.794	136.4	32.458	94.792	136.4	32.465	94.801	136.4	32.458	94.794
100%	Vnom	178.99	32.702	94.547	179	32.703	94.547	179	32.714	94.548	179	32.708	94.530	179	32.707	94.529
10%	Vmax	16.62	38.724	85.416	16.62	38.734	85.442	16.62	38.724	85.437	16.61	38.737	85.378	16.61	38.742	85.375
20%	Vmax	37.027	39.172	91.507	37.02	39.137	91.513	37.01	39.161	91.496	37.02	39.132	91.520	37	39.06	91.516
30%	Vmax	55.317	39.841	92.870	55.32	39.845	92.870	55.32	39.848	92.870	55.33	39.832	92.893	55.32	39.847	92.866
50%	Vmax	91.69	39.859	93.999	91.7	39.865	94.013	91.7	39.865	94.013	91.7	39.862	94.009	91.69	39.859	94.009
75%	Vmax	135.26	39.888	94.704	135.3	39.892	94.702	135.3	39.887	94.707	135.3	39.88	94.713	135.3	39.893	94.709
100%	Vmax	179.78	39.903	94.806	179.8	39.897	94.799	179.8	39.896	94.800	179.8	39.9	94.797	179.8	39.911	94.783

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	16.057	25.664	87.371	16.06	25.632	87.386									
20%	Vmin	35.89	25.585	92.691	35.89	25.574	92.700									
30%	Vmin	53.26	26.164	93.927	53.26	26.178	93.928									
50%	Vmin	95.397	25.764	94.574	95.4	25.772	94.586									
75%	Vmin	133.48	25.635	94.477	133.5	25.638	94.472									
100%	Vmin	173.58	25.814	92.463	173.6	25.823	92.487									
10%	Vnom	16.23	32.843	86.278	16.23	32.841	86.267									
20%	Vnom	35.78	33.415	91.814	35.79	33.347	91.863									
30%	Vnom	54.147	32.363	93.577	54.15	32.332	93.594									
50%	Vnom	89.36	32.635	94.358	89.38	32.629	94.379									
75%	Vnom	136.4	32.455	94.806	136.4	32.462	94.801									
100%	Vnom	178.95	32.703	94.528	178.9	32.708	94.524									
10%	Vmax	16.61	38.748	85.378	16.61	38.742	85.371									
20%	Vmax	37.007	39.161	91.465	37.07	39.744	91.410									
30%	Vmax	55.323	39.836	92.876	55.33	39.841	92.882									
50%	Vmax	91.703	39.859	94.016	91.71	39.864	94.013									
75%	Vmax	135.26	39.886	94.709	135.3	39.887	94.707									
100%	Vmax	179.76	39.903	94.793	179.8	39.905	94.793									