80 PLUS Verification and Testing Report

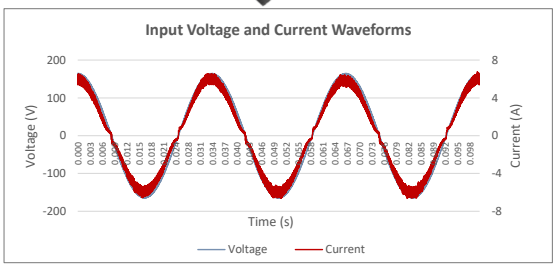


TYPICAL EFFICIENCY (50% Load):	91.67%
AVERAGE EFFICIENCY :	83.07%
AVERAGE STANDBY EFFICIENCY :	73.83%
80 PLUS COMPLIANT:	Gold

ID Number	8169
Manufacturer	Hanmi Micronics Inc.
Model Number	MCLE850GDF12H
Sample 1 S/N:	N/A
Sample 2 S/N:	N/A
Type	ATX12V, ATX 3.1, EPS12V
Test Date	4/7/26

Rated	Value	Units
Input Voltage	100-240	Volts
Input Current	10-5	Amps
Input Frequency	50-60	Hz
Rated Output Power	850	Watts

Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.



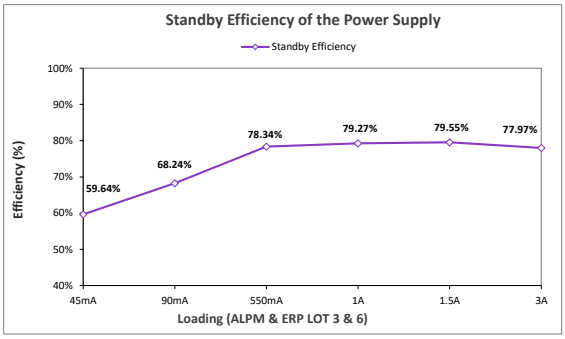
Input AC Current Waveform (ITHD = 5.17%, 50% Load)

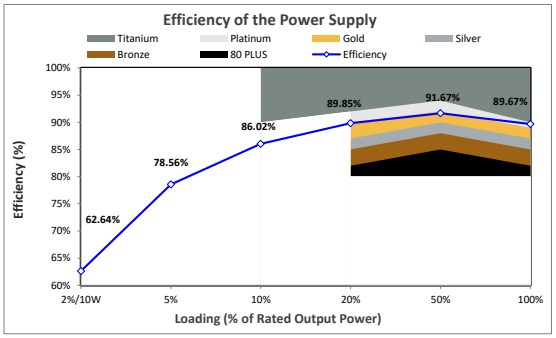
I_{RMS} (A)	PF	I_{THD} (%)	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5VSB		
0.152	0.5256	28.64	0%	9.22	No-Load						
0.290	**0.8243**	19.58	2%/10W	27.55	12.183/1.244	12.112/0.005	3.322/0.211	5.084/0.211	5.140/0.053	17.26	62.64%
0.521	**0.9159**	13.52	5%	54.89	12.175/3.109	12.124/0.013	3.322/0.529	5.083/0.529	5.136/0.132	43.12	78.56%
0.907	**0.9612**	7.80	10%	100.20	12.174/6.213	12.118/0.026	3.323/1.057	5.085/1.057	5.126/0.263	86.19	86.02%
1.692	**0.9859**	5.57	20%	191.92	12.180/12.429	12.112/0.053	3.317/2.114	5.066/2.115	5.106/0.527	172.43	89.85%
4.090	**0.9962**	5.17	50%	468.56	12.127/31.077	12.152/0.132	3.325/5.286	5.076/5.287	5.055/1.317	429.52	91.67%
8.314	**0.9969**	5.21	100%	953.41	12.067/62.151	12.190/0.263	3.328/10.572	5.069/10.573	4.963/2.632	854.94	89.67%

Note: Efficiency data was obtained from Sample 1 (Serial Number: N/A)

I_{RMS} (A)	PF	I_{THD} (%)	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)	Output Watts	Standby Efficiency
					5VSB		
0.084	0.0075	22.17	0mA	0.07	Vampire Load		
0.127	**0.0266**	24.24	45mA	0.39	5.147/0.045	0.23	59.64%
0.178	**0.0332**	30.07	90mA	0.68	5.146/0.090	0.46	68.24%
0.221	**0.1415**	69.60	550mA	3.60	5.132/0.550	2.82	78.34%
0.263	**0.2134**	80.78	1A	6.45	5.114/1.000	5.11	79.27%
0.319	**0.2622**	83.54	1.5A	9.62	5.101/1.500	7.65	79.55%
0.564	**0.2993**	85.54	3A	19.43	5.047/3.002	15.15	77.97%

Note: Standby efficiency data was obtained from Sample 2 (Serial Number: N/A)





These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications.
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