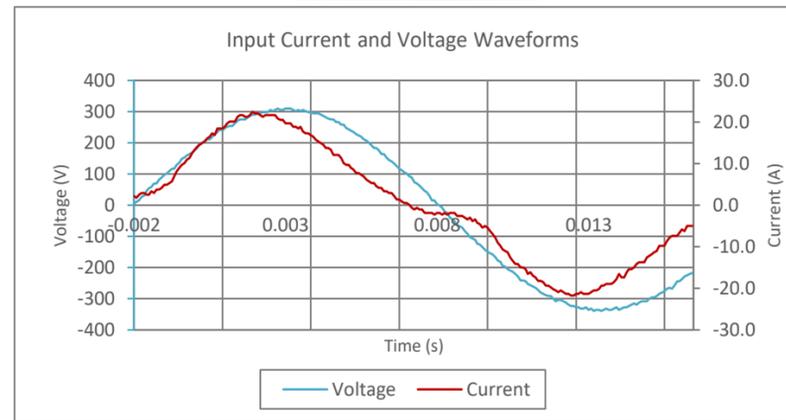


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	88.02%
AVERAGE EFFICIENCY :	86.83%
80 PLUS COMPLIANT:	YES



ID Number	EU-674
Manufacturer	HANMI MICRONICS INC.
Model Number	HP1-N500ST-E12S
Serial Number	N/A
Year	2020
Type	ATX12V
Test Date	5/26/20

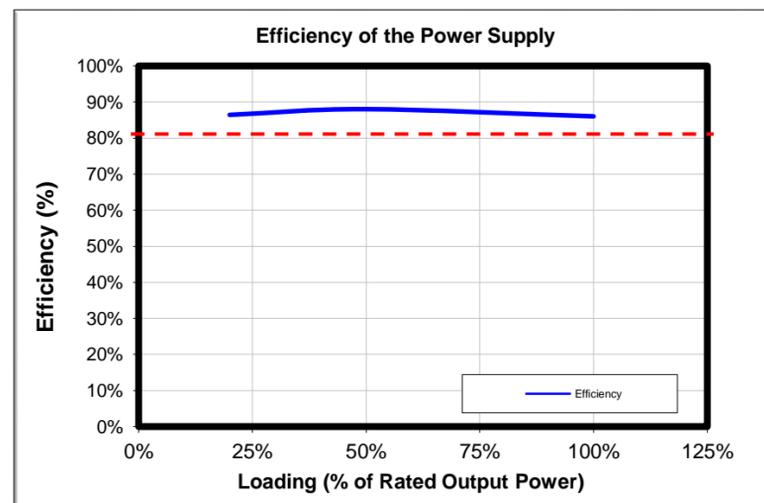
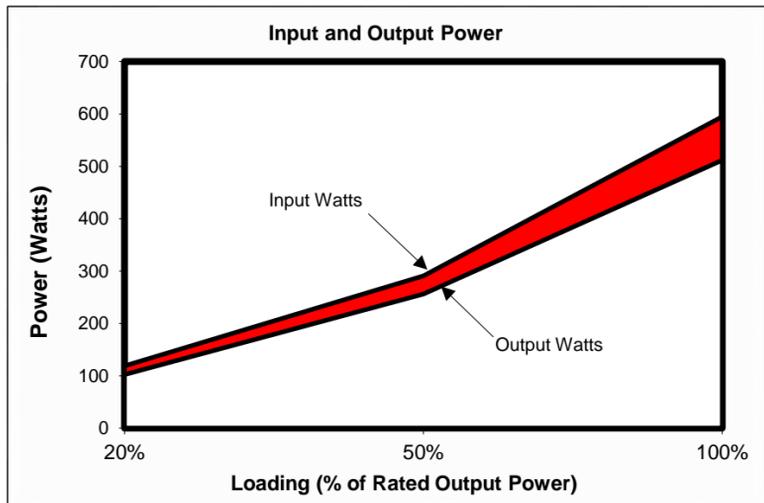


Rated Specifications	Value	Units
Input Voltage	200-240	Volts
Input Current	6.3	Amps
Input Frequency	50-60	Hz
Rated Output Power	500	Watts

Note: All measurements were taken with input voltage at 230 V nominal at 50 Hz.

Input AC Current Waveform (ITHD = 21.22%, 50% Load)

I _{RMS}	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		
0.32	0.83	31.83%	10%	62.03	12.28/3.35	12.21/0.02	3.33/1.02	5.06/1.02	5.17/0.24	51.17	82.49%
0.57	0.90	27.33%	20%	118.33	12.28/6.69	12.23/0.05	3.33/2.03	5.05/2.02	5.17/0.48	102.28	86.44%
1.33	0.95	21.22%	50%	290.90	12.28/16.78	12.31/0.12	3.32/5.08	5.05/5.04	5.14/1.2	256.05	88.02%
2.66	0.97	17.09%	100%	594.60	12.28/33.52	12.45/0.24	3.32/10.17	5.05/10.06	5.1/2.41	511.51	86.03%



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. <http://www.80plus.org/>

