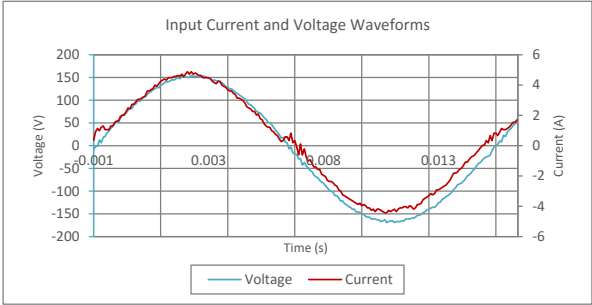


80 PLUS Verification and Testing Report

| | |
|---------------------------------------|---------------|
| TYPICAL EFFICIENCY (50% Load): | 92.47% |
| AVERAGE EFFICIENCY : | 91.30% |
| 80 PLUS COMPLIANT: | YES |



| | |
|----------------------|--------------------------------|
| ID Number | 5008 |
| Manufacturer | HIGH POWER ELECTRONIC CO., LTD |
| Model Number | GP650B-OCPT |
| Serial Number | N/A |
| Year | 2017 |
| Type | ATX12V |
| Test Date | 8/8/17 |

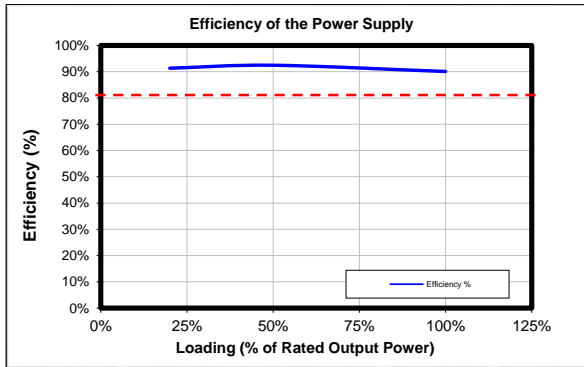
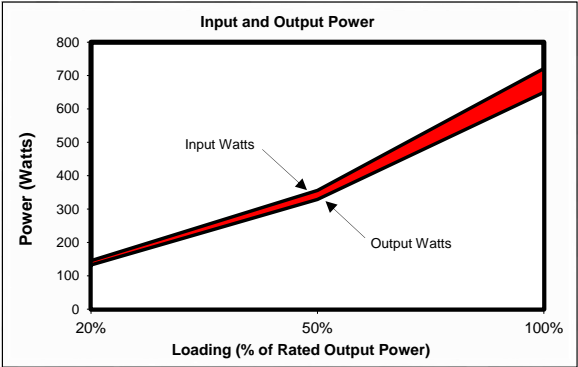


Input AC Current Waveform (ITHD = 5.465%, 50% Load)

| Rated Specifications | Value | Units |
|---------------------------|------------|--------------|
| Input Voltage | 100-240 | Volts |
| Input Current | 10 | Amps |
| Input Frequency | 50-60 | Hz |
| Rated Output Power | 650 | Watts |

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

| 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 |
| 0.86 | 0.77 | 16.89% | 10% | 75.76 | 12.24/4.45 | 11.82/0.02 | 3.36/1.18 | 5.01/1.18 | 5.01/0.33 | 66.20 | 87.38% |
| 1.50 | 0.84 | 13.36% | 20% | 145.30 | 12.22/8.92 | 11.53/0.05 | 3.35/2.37 | 5.01/2.36 | 4.99/0.66 | 132.71 | 91.34% |
| 3.25 | 0.95 | 5.47% | 50% | 355.85 | 12.15/22.27 | 11.79/0.12 | 3.32/5.93 | 4.98/5.87 | 4.95/1.64 | 329.05 | 92.47% |
| 6.36 | 0.99 | 4.99% | 100% | 721.15 | 12.06/44.26 | 12.06/0.25 | 3.28/11.86 | 4.93/11.71 | 4.86/3.28 | 649.70 | 90.09% |



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/>

