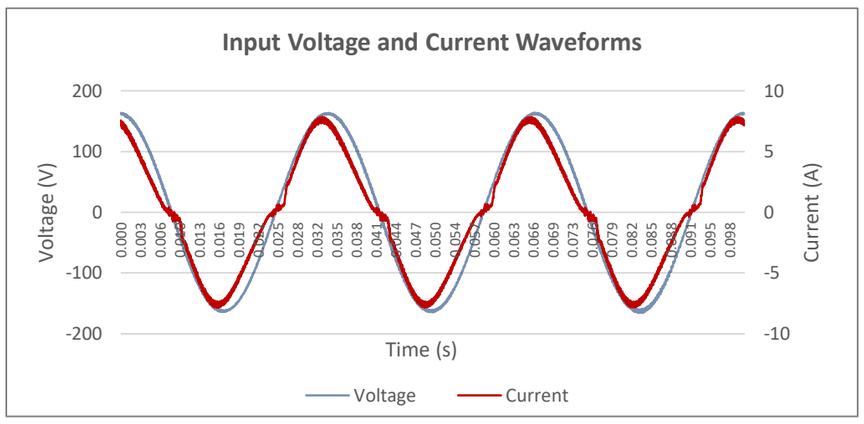
# 80 PLUS Verification and Testing Report

| | |
|---|---|
| **TYPICAL EFFICIENCY (50% Load):** | **91.56%** |
| **AVERAGE EFFICIENCY :** | **81.88%** |
| **AVERAGE STANDBY EFFICIENCY :** | **63.80%** |
| **80 PLUS COMPLIANT:** | **Gold** |



| | |
|---|---|
| **ID Number** | 7810 |
| **Manufacturer** | Channel Well Technology Co. |
| **Model Number** | HPN1000R-GU |
| **Sample 1 S/N:** | N/A |
| **Sample 2 S/N:** | N/A |
| **Type** | ATX12V |
| **Test Date** | 4/29/25 |




Input AC Current Waveform (ITHD = 13.9%, 50% Load)

| Rated | Value | Units |
|---|---|---|
| **Input Voltage** | 100-240 | **Volts** |
| **Input Current** | 15-7.5 | **Amps** |
| **Input Frequency** | 47-63 | **Hz** |
| **Rated Output Power** | 1000 | **Watts** |

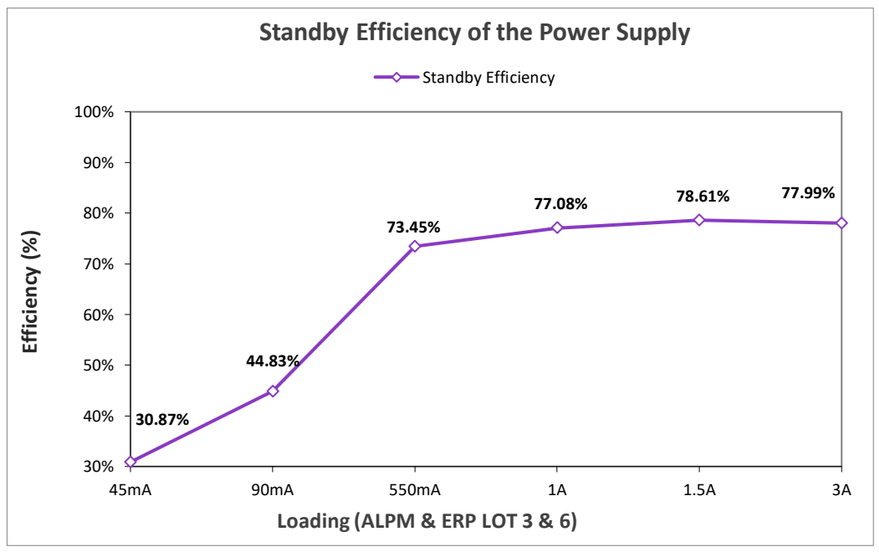
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

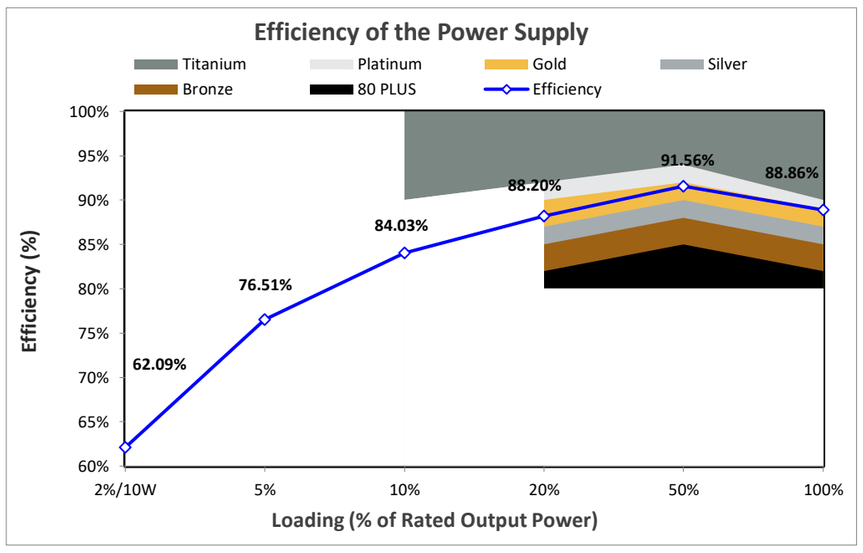
| $I_{RMS\ (A)}$ | PF | $I_{THD\ (\%)}$ | Load | Input Watts | DC Terminal Voltage (V)/ DC Load Current (A) | | Output Watts | Efficiency |
|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0V | 5.0Vsb | | |
| 0.192 | 0.6363 | 19.10 | 0% | **14.03** | **No-Load** | | | |
| 0.321 | **0.8833** | 11.40 | 2%/10W | **32.66** | 12.165/1.643 | 5.093/0.059 | **20.28** | **62.09%** |
| 0.600 | **0.9593** | 11.32 | 5% | **66.14** | 12.145/4.106 | 5.088/0.148 | **50.61** | **76.51%** |
| 1.069 | **0.9809** | 12.61 | 10% | **120.62** | 12.163/8.210 | 5.079/0.296 | **101.35** | **84.03%** |
| 2.038 | **0.9799** | 15.83 | 20% | **229.65** | 12.153/16.421 | 5.062/0.592 | **202.55** | **88.20%** |
| 4.868 | **0.9850** | 13.90 | 50% | **551.44** | 12.122/41.049 | 5.011/1.479 | **504.91** | **91.56%** |
| 9.908 | **0.9904** | 11.11 | 100% | **1128.95** | 12.047/82.093 | 4.922/2.956 | **1003.24** | **88.86%** |

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 | | |
| 0.096 | 0.0402 | 12.09 | 0mA | **0.44** | **Vampire Load** | | |
| 0.097 | **0.0668** | 18.19 | 45mA | **0.74** | 5.087/0.045 | **0.23** | **30.87%** |
| 0.099 | **0.0900** | 23.11 | 90mA | **1.02** | 5.087/0.090 | **0.46** | **44.83%** |
| 0.118 | **0.2800** | 55.00 | 550mA | **3.80** | 5.080/0.550 | **2.79** | **73.45%** |
| 0.147 | **0.3906** | 67.77 | 1A | **6.58** | 5.074/1.000 | **5.07** | **77.08%** |
| 0.187 | **0.4487** | 74.27 | 1.5A | **9.67** | 5.067/1.500 | **7.60** | **78.61%** |
| 0.344 | **0.4913** | 79.56 | 3A | **19.42** | 5.046/3.001 | **15.15** | **77.99%** |

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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