# 80 PLUS Verification and Testing Report

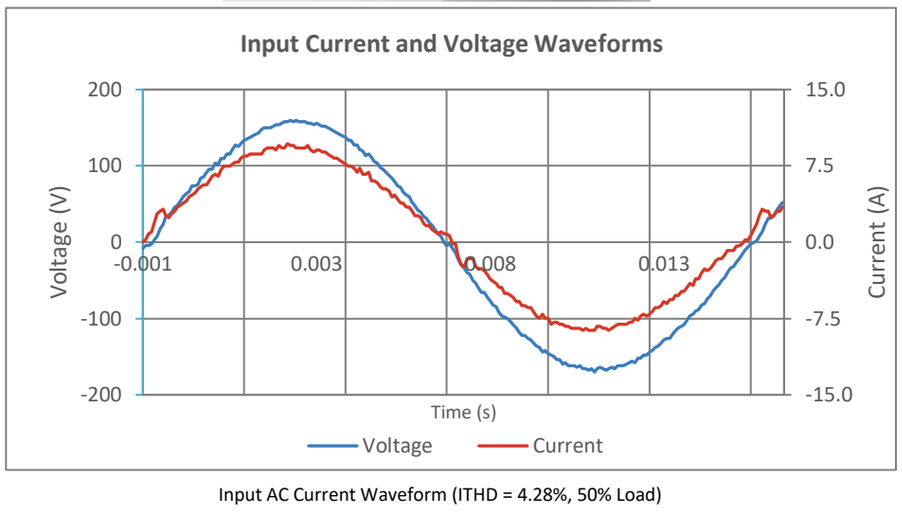
| | |
|---|---|
| **TYPICAL EFFICIENCY (50% Load):** | **93.27%** |
| **AVERAGE EFFICIENCY :** | **91.15%** |
| **80 PLUS COMPLIANT:** | **Platinum** |



| | |
|---|---|
| **ID Number** | 6852.1 |
| **Manufacturer** | M.RED |
| **Model Number** | MRR-1300AP |
| **Serial Number** | N/A |
| **Year** | 2022 |
| **Type** | ATX12V |
| **Test Date** | 7/13/22 |

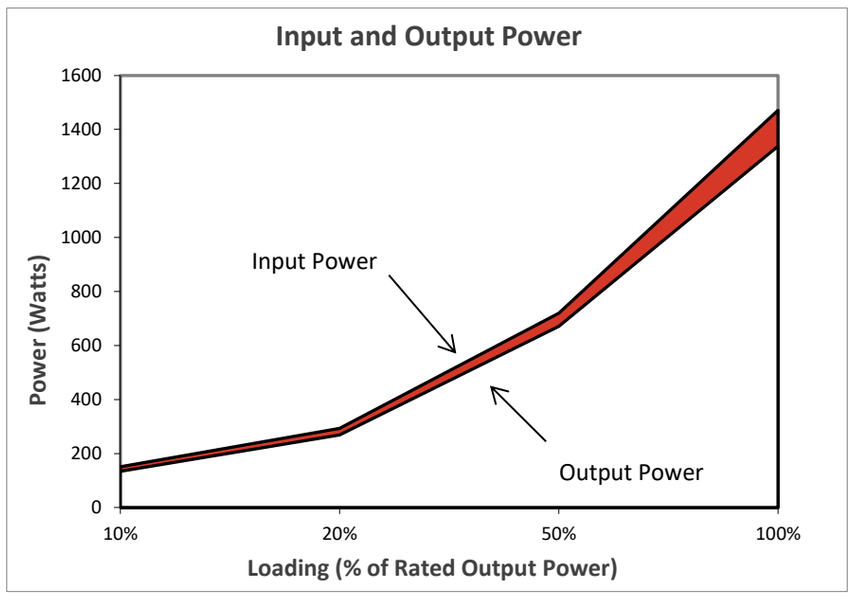
| Rated Specifications | Value | Units |
|---|---|---|
| **Input Voltage** | 100-240 | **Volts** |
| **Input Current** | 15-8 | **Amps** |
| **Input Frequency** | 47-63 | **Hz** |
| **Rated Output Power** | 1300 | **Watts** |

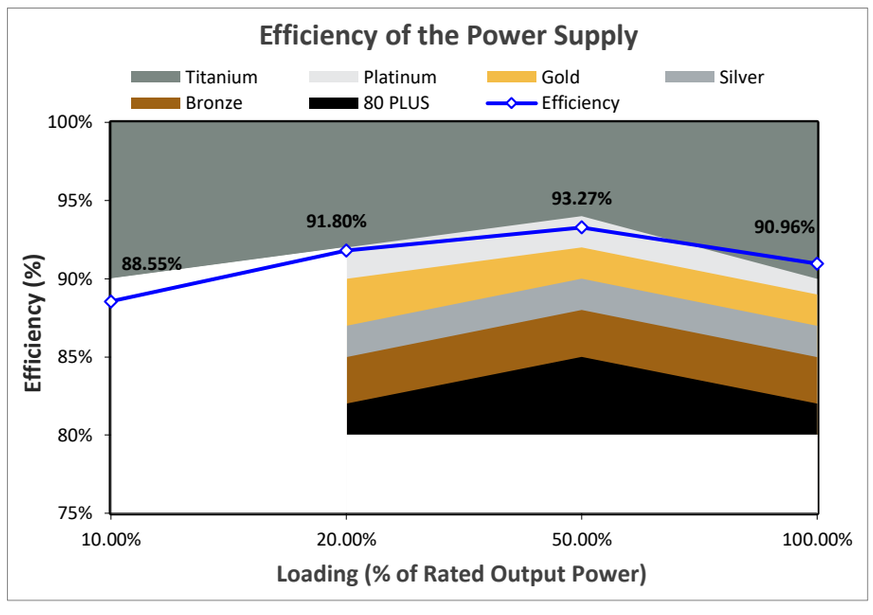
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.




Input AC Current Waveform (ITHD = 4.28%, 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 | | |
| 1.364 | 0.9677 | 9.51% | 10% | **151.73** | 12.39/9.79 | 11.31/0.05 | 3.33/1.36 | 5.01/1.36 | 5.01/0.23 | **134.36** | **88.55%** |
| 2.570 | 0.9888 | 6.28% | 20% | **292.20** | 12.39/19.55 | 11.33/0.1 | 3.34/2.72 | 5.02/2.71 | 5.01/0.45 | **268.25** | **91.80%** |
| 6.285 | 0.9960 | 4.28% | 50% | **719.60** | 12.39/48.93 | 11.44/0.23 | 3.34/6.8 | 5.02/6.74 | 5.01/1.13 | **671.19** | **93.27%** |
| 12.838 | 0.9963 | 3.71% | 100% | **1471.10** | 12.39/97.55 | 11.63/0.45 | 3.35/13.62 | 5.03/13.45 | 5.01/2.26 | **1338.07** | **90.96%** |




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/*