

Test plan name:	Power Draw Requirements
Test plan number:	ER01
Revision number:	1
Date of last revision:	April 17, 2017

Introduction:

This test plan is to ensure that the full system is not drawing large amounts of power.

Features to be Tested

- The power used by the NEMA 14 power supply.
- The power used by the NEMA 34 power supply.

Approach

The wall outlets are 110V. The NEMA 14 power supply draws 1.5A. This is limited by a fuse, so there is no way that the supply can draw substantially more current than this. This means that the power is 165W. The NEMA 34 power supply draws 3.2A. This is also limited by a fuse. This means that the power is 352W.

This means that the total power is 517W. Considering the fuses, it is impossible for the system to draw more than 1kW.

Data:

None.

Conclusions:

The total power is 517W. After considering the fuses, which limit the current, it is impossible for the system to draw more than 1kW.

Additional Considerations:

None.