

POWER SUPPLY

FOR STANDARD CABINET



PLUG-IN STORAGE SYSTEMS INC. | MAY 30, 2023

POWER CONSUMPTION FOR STANDARD CABINET

The cabinet power supply consists of the supply for control system of the cabinet and the power supply of the laptops. The control system includes fans and switches as optional. The details are as following:

Switch: 200 w (optional)

FAN: 2.16 w

For laptop computers, each one needs 85 w of power. It multiplies with the drawer count to get the total power consumption. For the fans, each fan uses 2.16 w of power, and it multiplies with the fan count in a cabinet to get the total consumption.

The following is some examples for the calculation of powers:

Drawer Number	Fan Number	Power for Laptops	Power for Control Units	Total Power	Total Current
10	4	850 w	208.64 w	1058.64 w	9.6 A
20	8	1700 w	217.28 w	1917.28 w	17.4 A
30	10	2550 w	221.6 w	2771.6 w	25.2 A

The use of extension cord and power strip is based on the count of drawers. For a cabinet with 10 drawers such as 2052-L-10, one extension cord is enough. For a cabinet with 20 drawers such as 4052-L-20, it usually uses two extension cords. For a cabinet with 30 drawers such as 4852-L-30, it usually uses three extension cords.

*** The above calculation of power supply is based on the maximum power consumption. When all the laptops are fully charged, the power consumption is normally very low. (Might be less than 400 w or 3.6 Amp)