

POWER SUPPLY

FOR CA CABINET



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POWER CONSUMPTION FOR CA 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 a computer, lock system, switch, and UPS. The details are as following:

Computer system: 60 w

Lock system: 60 w

Switch: 200 w

UPS: 300 w

For laptop computers, each one needs 85 w of power. It multiplies with the drawer count to get the total power consumption.

The following is some examples for the calculation of powers:

Drawer Number	Power for Laptops	Power for Control Units	Total Power	Total Current
8	680 w	620 w	1300 w	12 A
10	850 w	620 w	1470 w	13 A
12	1020 w	620 w	1640 w	15 A
16	1360 w	620 w	1980 w	18 A
18	1500 w	620 w	2150 w	20 A
20	1700 w	620 w	2320 w	21 A
24	2040 w	620 w	2660 w	24 A
30	2550 w	620 w	3170 w	29 A

The use of extension cord and power strip is based on the count of drawers. For a cabinet with 10 drawers such as CA2052-L-10, one extension cord is enough. For a cabinet with 20 drawers such as CA4052-20, it usually uses two extension cords. For a cabinet with 30 drawers such as CA6052-30, 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 and the cabinet is in an idle state, the power consumption is normally very low. (Might be less than 500 w or 4.5 Amp)