



# Cisco Power Calculator -Power Results



*Disclaimer: The Cisco Power Calculator is intended to be an educational resource and a starting point in planning your power requirement; it is not a final recommendation from Cisco. This tool does not check for software compatibility. To determine the power requirements and software most appropriate for your company we suggest you work with a Cisco representative, Cisco channel partner or a solutions provider.*







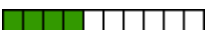
## Product Family:Catalyst 6500

Power Consumption/Heat Dissipation Summary			
Slot	Line Card	Optional DFC	Power Over Ethernet Capabilities
1	WS-X6148A-GE-45AF	--	IEEE PoE
2	WS-X6148A-GE-45AF	--	IEEE PoE
3	WS-X6148A-GE-45AF	--	IEEE PoE
4	WS-X6148A-GE-45AF	--	IEEE PoE
5	WS-SUP32-10GE-3B	--	--
6	WS-SUP32-10GE-3B	--	--
7	WS-X6148A-GE-45AF	--	IEEE PoE
8	WS-X6148A-GE-45AF	--	IEEE PoE
9	WS-X6148A-GE-45AF	--	IEEE PoE
Minimum Power Supply		Percentage Of Power Used	
Single/Redundant WS-CAC-8700W-E with a Dual 220V input		95.96 % 	
First Alternative Power Supply		Percentage of Power used	
Single/Redundant WS-CAC-6000W with Dual 220V inputs		92.67 % 	
Total Output Current(@42V)	Total Output Power	Total Typical Output Power	Total Heat Dissipation
127.35 Amps	5348.67 Watts	4278.93 Watts	9154.08 BTU/Hr

## Quick Facts



Selected Supervisor Engine	WS-SUP32-10GE-3B
Selected Chassis	WS-C6509-E
Selected Voltage	200-240 Volts AC
Selected FanTray	WS-C6509-E-FAN
Chassis Slots	9
Power Supply Options	Single/Redundant WS-CAC-8700W-E with a Dual 220V input
	Single/Redundant WS-CAC-6000W with Dual 220V inputs
	Combined WS-CAC-4000W
	Single/Redundant WS-CAC-8700W-E with a Triple 220V input
	Combined WS-CAC-8700W-E with a Dual 220V input
	Combined WS-CAC-6000W with Dual 220V inputs
	Combined WS-CAC-8700W-E with a Triple 220V input
Line Card Slots	8
Rack Units	15

Power Supply Details				
Minimum Power Supply	Percentage of Power used	Total Output Current(@42V) for This PSU(A)	Total Output Current(@42V) Used (A)	Total Output Current(@42V) Remaining (A)
<b>Single/Redundant WS-CAC-8700W-E with a Dual 220V input</b>	<b>95.96 %</b> 	<b>132.71</b>	<b>127.35</b>	<b>5.36</b>
Other Power Supply Options	Percentage of Power used	Total Output Current(@42V) for This PSU(A)	Total Output Current(@42V) Used (A)	Total Output Current(@42V) Remaining (A)
Single/Redundant WS-CAC-6000W with Dual 220V inputs	92.67 % 	137.42	127.35	10.07
Combined WS-CAC-4000W	84.56 % 	150.60	127.35	23.25
Single/Redundant WS-CAC-8700W-E with a Triple 220V input	63.12 % 	201.76	127.35	74.41
Combined WS-CAC-8700W-E with a Dual 220V input	57.46 % 	221.63	127.35	94.28
Combined WS-CAC-6000W with Dual 220V inputs	55.60 % 	229.03	127.35	101.68
Combined WS-CAC-8700W-E with a Triple 220V input	37.80 % 	336.94	127.35	209.59

Configuration Details					
Slot	Line Card	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
FAN1	WS-C6509-E-FAN	3.58	150.36	120.29	604.10
1	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
2	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
3	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
4	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
5	WS-SUP32-10GE-3B	4.19	175.98	140.78	707.03
6	WS-SUP32-10GE-3B	4.19	175.98	140.78	707.03
7	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
8	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
9	WS-X6148A-GE-45AF	2.68	112.56	90.05	452.23
	Sub Total	30.72	1290.24	1032.19	5183.74
PoE Device	Quantity	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
7941G-GE - 0.3071 amps (12.9W)	280	96.63	4058.43	4058.43	3970.35
		Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
	<b>Total</b>	<b>127.35</b>	<b>5348.67</b>	<b>4278.93</b>	<b>9154.08</b>

**PLEASE REFER TO THE NOTES PAGE FOR IMPORTANT INFORMATION :**

NOTE :

- The Catalyst 6500 backplane power connectors for the linecards, fan trays and Supervisors operate at 42V. The power supplies take the power from the source and convert it into a 42V feed for these power connectors.
- Output Power is the amount of power delivered from the Power Supply to the Catalyst 6500. To figure Input Power, divide output power by .85 (typical efficiency of the power supplies).
- Output Power and Heat Dissipation numbers computed by the Cisco Power Calculator are maximum values and can be used for facility power and cooling capacity planning. These figures are not indicative of the actual power draw or heat dissipation. Typical power draw is about 20% lower than the maximum value shown. Also note that most of power allocated for PoE devices is dissipated at the end points.
- Output from the Cisco Power Calculator may not match the output from "show power" or certain "show energywise" commands due to the way the system dynamically allocates power for PoE device bootup. This dynamically allocated power will not affect the overall selection of the proper power supply by the Cisco Power Calculator.
- The Power Calculator attempts to provide the power budget rules employed in the latest software releases. It does not account for changes in the power management software made in previous versions. Please consult the power management section of the Release Notes for a history of changes to the software power management operation.