



# 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





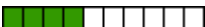
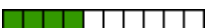
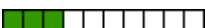
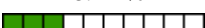
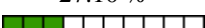
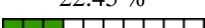
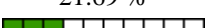
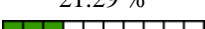
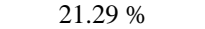
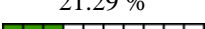
Power Consumption/Heat Dissipation Summary			
Slot	Line Card	Optional DFC	Power Over Ethernet Capabilities
1	WS-X6502-10GE	--	--
2	WS-X6724-SFP	--	--
3	WS-X6724-SFP	--	--
4	--EMPTY-SLOT--	--	--
5	--EMPTY-SLOT--	--	--
6	--EMPTY-SLOT--	--	--
7	WS-SUP720-3B	--	--
8	-- Reserved Power --	--	--
9	--EMPTY-SLOT--	--	--
10	--EMPTY-SLOT--	--	--
11	--EMPTY-SLOT--	--	--
12	--EMPTY-SLOT--	--	--
13	--EMPTY-SLOT--	--	--


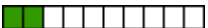
<b>Minimum Power Supply</b>		<b>Percentage Of Power Used</b>	
Single/Redundant WS-CAC-2500W		53.69 % 	
<b>First Alternative Power Supply</b>		<b>Percentage of Power used</b>	
Single/Redundant WS-CAC-8700W-E with a Single 220V input		48.64 % 	
<b>Total Output Current(@42V)</b>	<b>Total Output Power</b>	<b>Total Typical Output Power</b>	<b>Total Heat Dissipation</b>
<b>29.80 Amps</b>	<b>1251.60 Watts</b>	<b>1001.28 Watts</b>	<b>3894.54 BTU/Hr</b>

## Quick Facts



Selected Supervisor Engine	WS-SUP720-3B
Selected Chassis	WS-C6513
Selected Voltage	200-240 Volts AC
Selected FanTray	WS-C6K-13SLOT-FAN2
Chassis Slots	13
Power Supply Options	Single/Redundant WS-CAC-2500W Single/Redundant WS-CAC-8700W-E with a Single 220V input Single/Redundant WS-CAC-6000W with a Single 220V input Single/Redundant WS-CAC-3000W Single/Redundant WS-CAC-4000W Combined WS-CAC-2500W Combined WS-CAC-8700W-E with a Single 220V input Combined WS-CAC-6000W with a Single 220V input Combined WS-CAC-3000W Single/Redundant WS-CAC-8700W-E with a Dual 220V input Single/Redundant WS-CAC-6000W with Dual 220V inputs Single/Redundant WS-CAC-8700W-E with a Triple 220V input Combined WS-CAC-8700W-E with a Dual 220V input Combined WS-CAC-8700W-E with a Triple 220V input Combined WS-CAC-4000W Combined WS-CAC-6000W with Dual 220V inputs
Line Card Slots	12
Rack Units	19

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-2500W</b>	<b>53.69 %</b> 	<b>55.50</b>	<b>29.80</b>	<b>25.70</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-8700W-E with a Single 220V input	48.64 % 	61.27	29.80	31.47
Single/Redundant WS-CAC-6000W with a Single 220V input	46.84 % 	63.62	29.80	33.82
Single/Redundant WS-CAC-3000W	45.17 % 	65.98	29.80	36.18
Single/Redundant WS-CAC-4000W	32.98 % 	90.36	29.80	60.56
Combined WS-CAC-2500W	32.22 % 	92.50	29.80	62.70
Combined WS-CAC-8700W-E with a Single 220V input	29.12 % 	102.32	29.80	72.52
Combined WS-CAC-6000W with a Single 220V input	28.11 % 	106.03	29.80	76.23
Combined WS-CAC-3000W	27.10 % 	109.97	29.80	80.17
Single/Redundant WS-CAC-8700W-E with a Dual 220V input	22.45 % 	132.71	29.80	102.91
Single/Redundant WS-CAC-6000W with Dual 220V inputs	21.69 % 	137.42	29.80	107.62
Single/Redundant WS-CAC-8700W-E with a Triple 220V input	21.29 % 	140.00	29.80	110.20
Combined WS-CAC-8700W-E with a Dual 220V input	21.29 % 	140.00	29.80	110.20
Combined WS-CAC-8700W-E with a Triple 220V input	21.29 % 	140.00	29.80	110.20

Combined WS-CAC-4000W	19.79 % 	150.60	29.80	120.80
Combined WS-CAC-6000W with Dual 220V inputs	16.56 % 	180.00	29.80	150.20

NOTE :

Chassis reserves power for Redundant Supervisor Engine if redundant Supervisor Engine slot is empty.

### Configuration Details

Slot	Line Card	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
FAN2	WS-C6K-13SLOT-FAN2	7.10	298.20	238.56	1198.06
1	WS-X6502-10GE	3.30	138.60	110.88	556.85
2	WS-X6724-SFP	2.98	125.16	100.13	502.85
3	WS-X6724-SFP	2.98	125.16	100.13	502.85
4	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
5	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
6	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
7	WS-SUP720-3B	6.72	282.24	225.79	1133.94
8	-- Reserved Power --	6.72	282.24	225.79	--
9	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
10	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
11	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
12	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
13	--EMPTY-SLOT--	0.00	0.00	0.00	0.00
		Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
	<b>Total</b>	<b>29.80</b>	<b>1251.60</b>	<b>1001.28</b>	<b>3894.54</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.