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-X6724-SFP	WS-F6700-DFC3CXL			
2	WS-X6624-FXS				
3	WS-X6608-T1				
4	WS-X6608-E1				
5	WS-X6582-2PA				
6	WS-X6548V-GE-TX		Prestandard PoE		
7	WS-SUP720-3BXL				
8	WS-SUP720-3BXL				
9	WS-X6716-10T-3CXL				
10	WS-X6716-10T-3C				
11	WS-X6708-10G-3C				
12	WS-X6608-T1				
13	WS-X6608-E1				

Minimum Power Supply		Percentage Of Power Used		
Single/Redundant PV	VR-4000-DC 3 inputs	90.1	6 %	
First Alternative Power Supply		Percentage of Power used		
Combined WS-CDC-2500W		88.34 %		
Total Output Current(@42V)	Total Output Power	Total Typical Output Power	Total Heat Dissipation	
81.71 Amps	3431.90 Watts	2745.52 Watts	15204.98 BTU/Hr	



Quick Facts

Selected Chassis	WS-C6513-E		
Selected Supervisor Engine	WS-SUP720-3BXL		
Selected Voltage	-60 Volts DC		
Selected FanTray	WS-C6513-E-FAN		
Chassis Slots	13		
Power Supply Options	Single/Redundant PWR-4000-DC 3 inputs		
	Combined WS-CDC-2500W		
	Combined PWR-4000-DC 2 inputs		
	Single/Redundant PWR-6000-DC with a Triple -60V input		
	Combined PWR-6000-DC with a Dual -60V input		
	Single/Redundant PWR-6000-DC with a Quadruple -60V input		
	Combined PWR-4000-DC 3 inputs		
	Combined PWR-6000-DC with a Triple -60V input		
	Combined PWR-6000-DC with a Quadruple -60V input		
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)
Single/Redundant PWR- 4000-DC 3 inputs	90.16 %	90.63	81.71	8.92
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)
Combined WS-CDC-2500W	88.34 %	92.50	81.71	10.79
Combined PWR-4000-DC 2 inputs	82.15 %	99.47	81.71	17.76
Single/Redundant PWR-6000 -DC with a Triple -60V input		101.84	81.71	20.13
Combined PWR-6000-DC with a Dual -60V input	80.07 %	102.05	81.71	20.34
Single/Redundant PWR-6000 -DC with a Quadruple -60V input	59.46 %	137.42	81.71	55.71
Combined PWR-4000-DC 3 inputs	54.10 %	151.05	81.71	69.34
Combined PWR-6000-DC with a Triple -60V input	48.14 %	169.73	81.71	88.02
Combined PWR-6000-DC with a Quadruple -60V input	35.68 %	229.03	81.71	147.32

Configuration Deta	ils				
Slot	Line Card	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
FAN1	WS-C6513-E-FAN	8.93	375.06	300.05	1506.86
1	WS-X6724-SFP	4.58	192.36	153.89	887.72
2	WS-X6624-FXS	1.54	64.68	51.74	298.49
3	WS-X6608-T1	1.98	83.16	66.53	383.77
4	WS-X6608-E1	1.98	83.16	66.53	383.77
5	WS-X6582-2PA	2.50	105.00	84.00	484.56
6	WS-X6548V-GE-TX	3.40	142.80	114.24	659.00
7	WS-SUP720-3BXL	7.82	328.44	262.75	1515.71
8	WS-SUP720-3BXL	7.82	328.44	262.75	1515.71
9	WS-X6716-10T-3CXL	12.23	513.66	410.93	2370.47
10	WS-X6716-10T-3C	11.53	484.26	387.41	2234.79
11	WS-X6708-10G-3C	10.58	444.36	355.49	2050.66
12	WS-X6608-T1	1.98	83.16	66.53	383.77
13	WS-X6608-E1	1.98	83.16	66.53	383.77
	Sub Total	78.85	3311.70	2649.36	15059.06
PoE Device	Quantity	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
7941G - 0.15 amps (6.3W)	1	0.15	6.30	6.30	6.93
CP-7910-SW (6.3W)	1	0.15	6.30	6.30	6.93
CP-7971G (14.9W)	1	0.15	6.30	6.30	16.38
CP-7940G (6.3W)	1	0.15	6.30	6.30	6.93
AP-1200 with b radio (6.2W)	1	0.15	6.20	6.20	6.82
AP-1200 with no radio (4.4W)	1	0.10	4.40	4.40	4.84
CP-7902G (5.6W)	1	0.13	5.60	5.60	6.16
CP-7970G (10.25W)	1	0.15	6.30	6.30	11.27
CP-7910G (6.3W)	1	0.15	6.30	6.30	6.93
AP-1200 with g radio (6.5W)	1	0.15	6.50	6.50	7.14
CP-7942/62 (6.3W)	1	0.15	6.30	6.30	6.93
CP-7965/45 (12W)	1	0.29	12.00	12.00	13.19
AP-1100 with b/g radio (4.9W)	1	0.12	4.90	4.90	5.39
CP-7975 (12W)	1	0.29	12.00	12.00	13.19

	Suo Total	Output Current(@42V) (A)	Output Power (W)	Typical Power Used (W)	Heat Dissipation (BTU/Hr)
(2.311)	Sub Total	2.86	120.20	120.20	145.92
7961G - 0.15 amps (6.3W)	1	0.15	6.30	6.30	6.93
CP-7905G (5.6W)	1	0.13	5.60	5.60	6.16
CP-7960G (6.3W)	1	0.15	6.30	6.30	6.93
CP-7912G (6.3W)	1	0.15	6.30	6.30	6.93

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 figure 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.