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:Cisco ASR 900

Power Consumption/Heat Dissipation Summary	
Slot	Line Card
RSP	A900-RSP3C-400-W
RSP1	A900-RSP3C-400-W
LC0	A900-IMA1Z8S-CXMS
LC1	A900-IMA48D-C
LC2	A900-IMA48T-C
LC3	A900-IMA48T-C
LC4	A900-IMA8Z
LC5	A900-IMA1Z8S-CXMS
LC6	A900-IMA48D-C
LC7	A900-IMA1C
LC8	A900-IMA1Z8S-CX
LC9	A900-IMA48T-C
LC10	A900-IMA8S1Z
LC11	-- EMPTY-SLOT --
LC12	-- EMPTY-SLOT --
LC13	-- EMPTY-SLOT --
LC14	-- EMPTY-SLOT --
LC15	-- EMPTY-SLOT --

Power Supply Options	Percentage of Power Used At 40C
Three DC 900 W Power Supplies required with redundancy	39.56 % 
Two DC 900 W Power Supplies required with no redundancy	59.33 % 
One DC 800W PSU for fan tray	85.00 % 

Total Input Current(A) 72V DC Input	Total Output Power At 40C	Total Typical Output Power	Total Heat Dissipation At 40C
16.48 Amps	1068.0 Watts	997.0 Watts	3641.88 BTU/Hr

Quick Facts

Selected Chassis	ASR-914
Chassis Slots	24
Rack Units	14
Line Card Slots	16
Selected Supervisor Engine	A900-RSP3C-400-W
Selected Fantray	A914-F2B-AIR-FAN A914-PWR-FAN
Selected Voltage	72 Volts DC
Power Supply Options	Available power supply options DC 800W PSU for fan tray DC 900 W Power Supplies required with no redundancy DC 900 W Power Supplies required with redundancy

NOTE :

1. Total Input Current - Total Input Current (amperes) allocated to the line cards and powered devices in the chassis.

Total Power Used At 40C - Total power (P-Output) that the systems require from the power supply. From the power supply perspective, this is the power out (P-output).

Total Power Used At 25C - Power used at 25C ambient temperature with full linerate IMIX traffic.

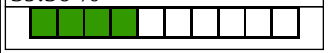
Total Heat Dissipation At 40C - Heat dissipation is a direct function of power used. To get heat in BTU/hr, multiply the power draw in watts by 3.41. Example the power calculator says that a given system draws 2800W. This means the system dissipates (2800*3.41 -->9548 BTU/hr)of heat.

Percentage of Power Used is color-coded with green if the power consumption is up to 80 percent, orange if the power consumption is between 81 and 90 percent, and red if between 91 and 100 percent.

2. Power used 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 30% lower than the maximum value shown.
3. 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.

Configuration Details							
Slot	Line Card	Input Current On 72V DC Input	Power Used At 25C (W)	Power Used At 40C (W)	Heat Dissipation At 40C (BTU/Hr)	Power Used At MAX(65C) (W)	Heat Dissipation At MAX(65C) (BTU/Hr)
SYSTEM-FAN	A914-F2B-AIR-FAN	---	72.00	150.00	511.50	340.00	1159.40
SYSTEM-FAN	A914-F2B-AIR-FAN	---	72.00	150.00	511.50	340.00	1159.40
SYSTEM-FAN	A914-PWR-FAN	---	30.00	45.00	153.45	66.00	225.06
RSP	A900-RSP3C-400-W	---	205.00	212.00	722.92	230.00	784.30
RSP1	A900-RSP3C-400-W	---	205.00	212.00	722.92	230.00	722.92
LC0	A900-IMA1Z8S-CXMS	---	82.00	86.00	293.26	96.00	327.36
LC1	A900-IMA48D-C	---	30.00	32.00	109.12	35.00	119.35
LC2	A900-IMA48T-C	---	44.00	48.00	163.68	52.00	177.32
LC3	A900-IMA48T-C	---	44.00	48.00	163.68	52.00	177.32
LC4	A900-IMA8Z	---	53.00	55.00	187.55	57.00	194.37
LC5	A900-IMA1Z8S-CXMS	---	82.00	86.00	293.26	96.00	327.36
LC6	A900-IMA48D-C	---	30.00	32.00	109.12	35.00	119.35
LC7	A900-IMA1C	---	55.00	58.00	197.78	62.00	211.42
LC8	A900-IMA1Z8S-CX	---	78.00	82.00	279.62	92.00	313.72
LC9	A900-IMA48T-C	---	44.00	48.00	163.68	52.00	177.32
LC10	A900-IMA8S1Z	---	15.00	24.00	81.84	29.00	98.89
LC11	-- EMPTY-SLOT --	---	0.00	0.00	0.00	0.00	0.00
LC12	-- EMPTY-SLOT --	---	0.00	0.00	0.00	0.00	0.00
LC13	-- EMPTY-SLOT --	---	0.00	0.00	0.00	0.00	0.00
LC14	-- EMPTY-SLOT --	---	0.00	0.00	0.00	0.00	0.00
LC15	-- EMPTY-SLOT --	---	0.00	0.00	0.00	0.00	0.00

		Input Current On 72V DC Input	Power Used At 25C (W)(Excluding A914-F2B-AIR-FAN Fan)	Power Used At 40C (W)(Excluding A914-F2B-AIR-FAN Fan)	Heat Dissipation At 40C (BTU/Hr)(Excluding A914-F2B-AIR-FAN Fan)	Power Used At MAX(65C) (W)(Excluding A914-F2B-AIR-FAN Fan)	Heat Dissipation At MAX(65C) (BTU/Hr)(Excluding A914-F2B-AIR-FAN Fan)
		16.48 Amps	997.0 Watts	1068.0 Watts	3641.88 BTU/Hr	1184.0 Watts	3976.06 BTU/Hr

Power Supply Details At 40C				
Power Supply Options	Percentage of Power used	Max load current allowed on these PSU configuration @ 72V	Load current on these PSU configuration @ 72 V	Load current remaining on these PSU configuration @ 72 V
Three DC 900 W Power Supplies required with redundancy	39.56 % 	41.67	16.48	25.19
Two DC 900 W Power Supplies required with no redundancy	59.33 % 	27.78	16.48	11.30
One DC 800W PSU for fan tray	85.00 % 	6.17	16.48	-10.31

NOTE :

1. Power used 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 30% lower than the maximum value shown.
2. A900-IMA1Z8S-CXMS is supported only up to 60C temperature.
3. N560-IMA2C is supported up to 55C temperature, and maximum power at 55C is 61W.