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-X6908-10G-2TXL | | | |
| 2 | WS-X6908-10G-2TXL | | | |
| 3 | WS-X6908-10G-2TXL | | | |
| 4 | WS-X6908-10G-2TXL | | | |
| 5 | WS-X6908-10G-2TXL | | | |
| 6 | WS-X6908-10G-2TXL | | | |
| 7 | VS-S2T-10G-XL | | | |
| 8 | Reserved Power | | | |
| 9 | WS-X6908-10G-2TXL | | | |
| 10 | WS-X6908-10G-2TXL | | | |
| 11 | WS-X6908-10G-2TXL | | | |
| 12 | WS-X6908-10G-2TXL | | | |
| 13 | WS-X6908-10G-2TXL | | | |
| | | | | |

| Minimum Power Supply | | Percentage Of Power Used | | |
|--|---------------------------|-----------------------------|-------------------------------|--|
| Single/Redundant WS-CAC-8700W-E with a Triple 220V input | | 91.48 % | | |
| | | | | |
| First Alternative Power Supply | | Percentage of Power used | | |
| Combined WS-CAC-8700W-E with a Dual 220V input | | 83.28 % | | |
| | | | | |
| Total Output Current(@42V) | Total Output Power | Total Typical Output Power | Total Heat Dissipation | |
| 184.57 Amps | 7751.94 Watts | 6201.55 Watts 29333.97 BTU/ | | |
| | | | | |
| | | | | |

| Quick Facts | | | |
|-------------|----------------------------|--|--|
| | Selected Chassis | WS-C6513-E | |
| | Selected Supervisor Engine | VS-S2T-10G-XL | |
| | Selected Voltage | 200-240 Volts AC | |
| | Selected FanTray | WS-C6513-E-FAN | |
| | Chassis Slots | 13 | |
| | Power Supply Options | 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 | 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 WS- CAC-8700W-E with a Triple 220V input | 91.48 % | 201.76 | 184.57 | 17.19 |
| 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-CAC-8700W- E with a Dual 220V input | 83.28 % | 221.63 | 184.57 | 37.06 |
| Combined WS-CAC-6000W with Dual 220V inputs | 80.59 % | 229.03 | 184.57 | 44.46 |
| Combined WS-CAC-8700W- E with a Triple 220V input | 54.78 % | 336.94 | 184.57 | 152.37 |

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) |
| FAN1 | WS-C6513-E-FAN | 5.15 | 216.30 | 173.04 | 869.02 |
| 1 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 2 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 3 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 4 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 5 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 6 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 7 | VS-S2T-10G-XL | 10.73 | 450.66 | 360.53 | 1810.59 |
| 8 | Reserved Power | 10.73 | 450.66 | 360.53 | |
| 9 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 10 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 11 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 12 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| 13 | WS-X6908-10G-2TXL | 14.36 | 603.12 | 482.50 | 2423.12 |
| | | Output Current(@42V) (A) | Output Power (W) | Typical Power Used (W) | Heat Dissipation (BTU/Hr) |
| | Total | 184.57 | 7751.94 | 6201.55 | 29333.97 |

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.