

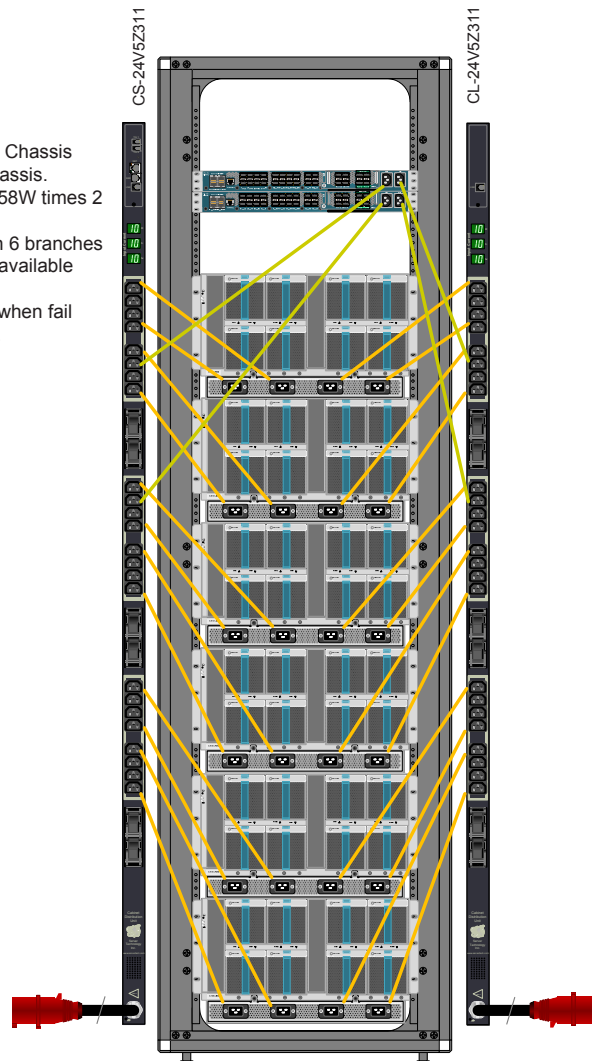
# Sentry Smart CDU's™ Power Cisco's Unified Computing System

## Server Technology's Sentry Smart CDU Solution to Power a Cabinet with Six Cisco UCS 5108 Series Blade Server Chassis and Two Cisco UCS 6120XP 20-Port Fabric Interconnects

3-Phase 415/240V 30A with six Cisco UCS 5108 Blade Server Chassis

**Notes:**

1. UCS 5108 Blade Server Chassis drawing 2250W times 6 chassis.
2. UCS 6120XP drawing 358W times 2 units.
3. 30A 3-phase CDU's with 6 branches on 20A fuses. Continuous available power of 17.3kW.
4. C13 outlet can be used when fail over does not exceed 12A.



The Cisco Unified Computing System is a next-generation data center platform that unites computing, network, storage access, and virtualization into a cohesive system designed to reduce total cost of ownership (TCO) and increase business agility. This application note will illustrate how to power and provide redundancy for six Cisco UCS 5108 Series Blade Server Chassis and two Cisco UCS 6120XP 20-Port Fabric Interconnects utilizing Server Technology's Smart CS-24V5Z311 Cabinet Power Distribution Unit (CDU) with (24) C13 outlets per CDU with a power input feed of 3-Phase 415/240 V 30 A power.

Note: Wiring guidelines vary per jurisdiction.

Enclosed are the loaded power draws for each device shown in the cabinet.

Cisco Devices	qty	Cisco Power Spec.	Derating	Expected Watts Each	C13	C19	Total Watts
UCS 6120XP	2	550 W	65%	358	2	0	716
UCS 5108	6	5000 W	45%	2250	0	4	13500
Total					4	24	14216

Total kW delivered for one 3-Phase 240 V 30 A in-feed source is 21.6 kW de-rated to 17.3 kW.

Power Requirements for Cisco Unified Computing System with Six 5108 Blade Server Chassis:

- Total Power Usage: 14.2 kW
- Input power feeds required: two 415 V, 3-Phase, 30 A, IEC 60309 plugs
- Number of Outlets: (36) C13 per cabinet
- Other requirements: Intelligent monitoring, local current indicators to help in load balancing

If one of the input power feeds fails the other CDU must be capable of carrying the whole load. The CS-24V5 provides plenty of power should this occur.

## Key Benefits:

- > Sentry Smart 3-Phase 30 A CDU's reduce the number of CDU's needed to deliver the power required by this cabinet configuration. This in turn reduces the number of power drops required for each cabinet.
- > Fewer power cords means lower infrastructure costs and improved airflow in a raised floor data center environment resulting in improved cooling in the cabinet.
- > Sentry Smart CDU's allow administrators to view the current load and environmental conditions remotely.
- > SNMP traps and email alerts ensure notification if a problem has occurred along with logging of all actions performed by user.
- > Local LED's Per Branch Circuit- Large, easy-to read displays let you determine if the load is balanced and provides visual indication that power is supplied to the CDU.
- > Environmental measurements- Qty (2) temperature and humidity measurements are provided per pair of CDU's.
- > Local and remote notification if a branch circuit is lost.
- > Master and Link unit configuration (CS/CL) allows two power in-feeds and all environmental information to be monitored via single IP address per cabinet.



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