

CPS 4200



Controller/Power Supply Module

CPS 4200

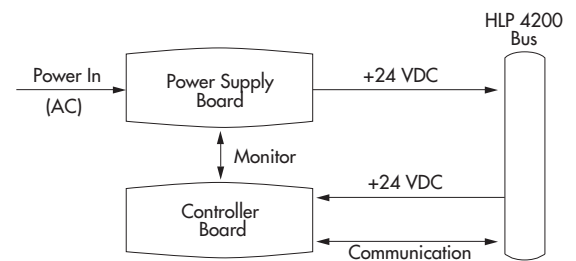
Product Description

The CPS 4200 controller/power supply module is the intelligent engine of the HLP 4200 broadband platform. It provides microprocessor control of the high-efficiency switching power supply, control of the communication bus, and supplies +24 VDC power to the power bus.

The power supply board drives all modules in the HLP 4200 platform using a common DC power bus. The controller portion of the CPS 4200 module controls the communication bus of the HLP 4200 platform, and provides local and remote communication for system monitoring and control. The CPS 4200 provides an internal fault diagnostic menu that can be read on the HLP 4200WD display, or remotely by means of the NETWatch™ Element Management System. Microprocessor controlled regulation circuitry and over voltage/current protection ensure optimal performance and reliability, and a microprocessor controlled fan maintains the unit's proper operating temperature.

The reliability of the CPS 4200 is further enhanced by powering the controller board directly from the platform bus, maintaining control in case of power supply board failure. A second CPS 4200 module may be installed in the platform and operated in a hot redundancy mode to enhance system reliability.

Standard Configuration



Advantages

The CPS 4200 module offers many advantages to enhance the power and flexibility of Harmonic's broadband communication equipment:

- Highly efficient 270 Watt power supply reduces overall power consumption.
- Over voltage protection enhances performance and reliability.
- Microprocessor controlled three speed fan automatically maintains optimal temperature, ensuring continuous, reliable operation.
- On-line replaceable fan allows for uninterrupted service.
- Automatic sensing of input AC voltage from 100 to 240 VAC provides for ease-of-installation.
- IEC power connector ensures worldwide cord availability.

User Interface

Front Panel	
Bi-state Status LED	Normal = Green, Alarm = Red
Module Selection Indicator	Yellow LED
Rear Panel	
	IEC male power connector
	62-pin D connector for controller cable to HLP 4200 platform

Output Power

Output Voltage	24.8 ± 0.3 VDC
Output Current	11 Amps maximum
Short circuit and over voltage protection	

Power Requirements

Input Voltage	100 - 240 VAC, auto sensing, 50/60 Hz
Back-up Input Voltage	+24 VDC
Efficiency	80% minimum at full load
Consumption	30 Watts maximum (CPS 4200 only) IEC male power connector
Fuse	Slow blow, 250 V, 5 Amps, 5 x 20 mm

Environmental

Operating Temperature Range	0° to 50° C / 32° to 122° F
Storage Temperature Range	-40° to +70° C / -40° to +158° F
Automatic 3-speed Fan Adjustment	Occurs at 40° & 50° C (104° & 122° F)
Relative Humidity	Maximum 85% non-condensing

Physical

Dimensions (WxHxD)	6.6 cm x 11.2 cm x 27.2 cm 2.6" x 4.4" x 10.7"
Weight	1.7 kg / 3.75 lbs.
Mounting	HLP 4200 platform; one module slot

