Cisco PowerVu D9190 Conditional Access Manager

The Cisco PowerVu® D9190 Conditional Access Manager (PCAM) is one of the core components of the PowerVu next-generation system. The Cisco® D9190 is used for encrypting services with Cisco PowerVu Conditional Access (PCA), and is designed for use with the Cisco Digital Content Manager (DCM) to provide a functional replacement for the PowerVu D9140 Advanced Multiplexer.

For network monitoring and control, the Cisco D9190 (Figures 1 and 2) is integrated with Cisco PowerVu Network Centre (PNC).

Figure 1. Cisco PowerVu D9190 Conditional Access Manager

Figure 2. Cisco D9190 Rear Panel

Chassis Overview

The D9190 chassis features dual-redundant and hot-swappable power supplies. It has the capacity to hold up to six modules. The chassis supports advanced internal common synchronization mechanisms that can be used to synchronize the various services being hosted. Dedicated management and auxiliary input ports are also provided for control system monitoring and communication. The PowerVu Conditional Access (CA) modules are field-replaceable to allow for fast service with minimum downtime. A contact-closure output is used to signal a major alarm to the control system when it is active.

Cisco PCA

The PCA module is used to encrypt entitlement control message (ECM) and entitlement management message (EMM) traffic and to communicate with a DCM using various Simulcrypt protocols. The PCA module has four 1000BASE-T Ethernet ports, one of which is used to communicate with the DCM Multiplexer.

Features

- PCA encryption
- Dual-redundant, hot-swappable power supplies
- Support for one PCA module
- PNC management support

- Support for up to 85 services
- Simulcrypt communications support

Specifications

Table 1 lists specifications for the Cisco PowerVu D9190 Conditional Access Manager.

Table 1. Product Specifications

Feature	Description
Conditional Access	
Brand	PowerVu CA
Crypto cycle	>= 1 sec
Services	85
Management	
Control system	Integrated in PNC
Inputs/Outputs	
Number of ports	Port 1 is for Simulcrypt communications Ports 2, 3, and 4 are unused
Type	Eight-pin RJ-45, MDI
Ethernet type	100/1000BASE-T
Format	Simulcrypt protocols
Environment and Physical	
Dimensions	1.73 in. H x 21.42 in. W x 17.36 in. D (4.4 cm H x 54.4 cm W x 44.1 cm D) 1U high, 19 in. rack-mountable, stackable
Operating temperature	32°to 122°F (0°to 50°C)
Storage temperature range	14°to 158°F (-10°to 70°C)
Weight	20.2 lb (9.2 kg)
Relative humidity	0 to 95%, noncondensing
Cooling	Forced cooling with air inlets on front panel, air exit at rear
Power Requirements	
Voltage range	90 to 264 VAC input
Line frequency	47 to 63 Hz
Consumption	400W maximum (typical power consumption is 120W)
Regulatory Compliance Standards	
CFR 47, Part 15, Subpart B Class A Unintentional Radiators	
CISPR 22:2008-09	
EN 55022:2006 +A1:2007, Class A - Information Technology Equipment	
CISPR 24:1997 +A1:2001, +A2:2002	
EN 55024:1998 +A1:2001, +A2:2003 EMC Requirements - Information Technology Equipment - Immunity Characteristics	
IEC 61000-3-2:2005/EN 61000-3-2:2006 Harmonic Currents, Class A	
IEC 61000-3-3:2002/EN 61000-3-3:1995' +A1:2001, +A2:2005 Flicker	
Australia Radio Communications (Electromagnetic Compatibility) Standard 2008	
CAN/CSA-C22.2 No. 60950-1-07	
UL 60950-1 Ed. 2 Mar 27 2007	
IEC 60950-1-am1 ed2.0 (2009-12), including all country and regional differences currently in force	
EN 60950-1:2006+A1:2010	

Ordering Information

Table 2 provides ordering information for the Cisco PowerVu D9190 Conditional Access Manager.

Table 2. Ordering Information

Chassis	Part Number
Chassis, D9190, 1RU (include 2AC power supply, software)	D9190-1RU
Chassis, D9190, 1RU, spare	CHAS-D9190-1RU=
Hardware Modules	
Module, D9190, PCA card	D9190-PCA-K9
Module, D9190, PCA card, spare	D9190-PCA-K9=
Power Supply	
PSU, D9036/D9190, AC, 400W, spare	D9036-PWR-400W-AC=
Accessories	
Kit, D9036/D9190, fan replacement, 1RU, spare	D9036-FAN-1RU=
Kit, D9036/D9190, air filter, 1RU, spare	D9036D9190-DUST=

Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed by technology and by network complexity to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

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