Cisco CRS SPA Interface Processor-800

The Cisco® CRS-1 Carrier Routing System is the industry's first carrier router offering continuous system operation, unprecedented service flexibility, and system longevity. The Cisco CRS-1 is powered by Cisco IOS® XR Software – a unique self-healing, distributed operating system designed for always-on operation while scaling system capacity up to 92 Tbps. The innovative system architecture combines the Cisco Silicon Packet Processor, the first programmable 40-Gbps application-specific integrated circuit (ASIC), with the Cisco Service Separation Architecture for unprecedented service flexibility and speed to service. The Cisco CRS-1 marks a new era in carrier IP Communications by powering the foundation for network and service convergence today while protecting investments for decades to come.

The Cisco® I-Flex design combines shared port adapters (SPAs) and SPA interface processors (SIPs), leveraging an extensible design that enables service prioritization for voice, video and data services. Enterprise and service provider customers can take advantage of improved slot economics resulting from modular port adapters that are interchangeable across Cisco routing platforms. The I-Flex design maximizes connectivity options and offers superior service intelligence through programmable interface processors that deliver line-rate performance. I-Flex enhances speed-to-service revenue and provides a rich set of QoS features for premium service delivery while effectively reducing the overall cost of ownership This data sheet contains the specifications for the Cisco CRS-1 SPA Interface Processor-800 (Cisco CRS-1 SIP-800; refer to Figure 1).

Figure 1. Cisco CRS-1 SIP-800 with SPAs



Product Specifications

Table 1 gives specifications of the Cisco CRS-1 SIP-800.

Table 1. Product Specifications

Feature	Description
Chassis Compatibility	Compatible with all current Cisco CRS-1 and CRS-3 line-card chassis
Software Compatibility	Cisco IOS XR Software Release 3.2 or higher for CRS-1 Cisco IOS XR Software Release 4.0.0 or later for CRS-3
Interface Types	Packet over SONET/SDH (POS) • OC-3c/STM-1c • OC-192c/STM-64c Gigabit Ethernet
Port Density	Six normal-height SPAs or three double-height SPAs or any combination in between

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Feature	Description
Reliability and Availability	Online insertion and removal (OIR) without affecting system traffic
Network Management	• Cisco IOS XR Software Command-Line Interface (CLI) • Simple Network Management Protocol (SNMP) • Extensible Markup Language (XML) interface • Cisco CRS-1 Craft Works Interface (CWI)
Physical Dimensions	• Occupies one physical-layer-interface-module (PLIM) slot on Cisco CRS-1 16- and 8-slot line card chassis • Weight: Minimum 5.8 lb (without any SPAs), Maximum 15 lb (with 6 SPAs) • Height: 20.6 in. (52.32 cm) • Depth: 11.2 in. (28.4 cm) • Width: 1.8 in. (4.57 cm)
Power	• 30W without any SPA • 150W with maximum SPA configuration
Environmental Conditions	• Storage temperature: –40 to 70°C (–40 to 158°F) • Operating temperature: ◦ Normal: 5 to 40°C (41 to 104°F) ◦ Short term: –5 to 50°C (23 to 122°F) • Relative humidity: ◦ Normal: 5 to 85% ◦ Short term: 5 to 90% but not to exceed 0.024 kg of water per kg of dry air Short term refers to a period of not more than 96 consecutive hours and a total of not more than 15 days in one year. (This refers to a total of 360 hours in any given year, but no more than 15 occurrences during that one-year period.)

Approvals and Compliance

Table 2 gives compliance information for the Cisco CRS-1 SIP-800.

Table 2. Compliance and Agency Approvals

Feature	Description
Safety Standards	• UL/CSA/IEC/EN 60950-1 • AS/NZS 60950
EMI	• FCC Class A • ICES 003 Class A • AS/NZS 3548 Class A • CISPR 22 (EN55022) Class A • VCCI Class A
Immunity (basic standards)	• IEC/EN-61000-4-2: Electrostatic Discharge Immunity (8-kV Contact, 15-kV Air) • IEC/EN-61000-4-3: Radiated Immunity (10V/m)
ETSI and EN	• EN300 386: Telecommunications Network Equipment (EMC) • EN55022: Information Technology Equipment (Emissions) • EN55024: Information Technology Equipment (Immunity) • EN50082-1/EN-61000-6-1: Generic Immunity Standard
Network Equipment Building System (NEBS)	This product is designed to meet the following requirements (qualification in progress): • SR-3580: NEBS Criteria Levels (Level 3) • GR-1089-CORE: NEBS EMC and Safety • GR-63-CORE: NEBS Physical Protection

Ordering Information

To place an order, visit Cisco Ordering Home Page or refer to Table 3.

Table 3. Ordering Information

Product Part Number	Product Name
CRS1-SIP-800 (=)	Cisco CRS-1 SPA Interface Processor-800

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For More Information

For more information about the Cisco CRS-1 SIP-800, contact your local Cisco account representative or visit: http://www.cisco.com/go/crs

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