

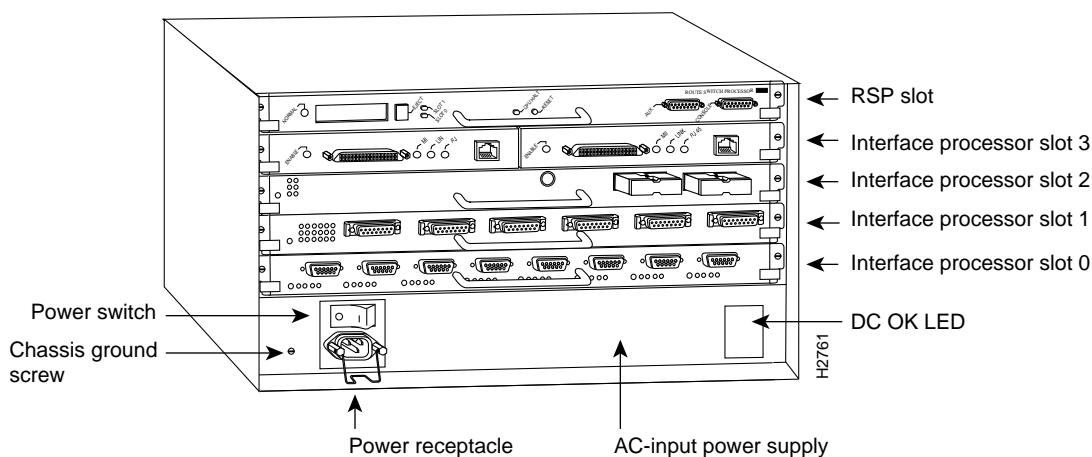
Product Overview

The Cisco 7505 router is a part of the Cisco 7500 series, and is a five-slot multiprotocol, multimedia router/bridge. Network interfaces reside on interface processors, which provide a direct connection between the Cisco Extended Bus (CyBus) and external networks.

The Cisco 7505 has five slots: four interface processor slots (0 through 3) and one slot for the Route Switch Processor (RSP1). The Cisco 7505 uses a single power supply, with two models available: DC input or AC input.

Figure 1-1 shows the interface-processor end of the Cisco 7505 (with an AC-input power supply installed).

Figure 1-1 Cisco 7505, Rear View



Following is a list of acronyms that identify the system components and features:

- CxBus—Cisco Extended Bus. A 533-megabits-per-second (Mbps) data bus for interface processors (the CxBus is used in the Cisco 7000 series routers, but CxBus interfaces processors will operate in the Cisco 7505).
- CyBus—Cisco Extended Bus. A 1.067-gigabits-per-second (Gbps) data bus for interface processors (one CyBus is used in the Cisco 7505).
- AIP—Asynchronous Transfer Mode (ATM) Interface Processor.
- CIP—Channel Interface Processor.
- EIP—Ethernet Interface Processor.
- FEIP—Fast Ethernet Interface Processor.
- FIP—FDDI (Fiber Distributed Data Interface) Interface Processor.
- FRU—Field-replaceable unit (as opposed to a spare part). A FRU can only be replaced by a Cisco certified technician. The arbiter board is categorized as an FRU; interface processors are categorized as spare parts.
- FSIP—Fast Serial Interface Processor.
- HIP—High-Speed Serial Interface (HSSI) Interface Processor.
- MIP—MultiChannel Interface Processor.
- OIR—Online insertion and removal. This feature allows you to replace interface processors and redundant power supplies without interrupting system power.
- PA—Port adapter. For example, the FSIP or MIP daughter card.
- RSP1—Route Switch Processor. The system processor board.
- TRIP—Token Ring Interface Processor.

System Specifications

Table 1-1 lists the specifications for the Cisco 7505 system.

Table 1-1 Cisco 7505 Specifications

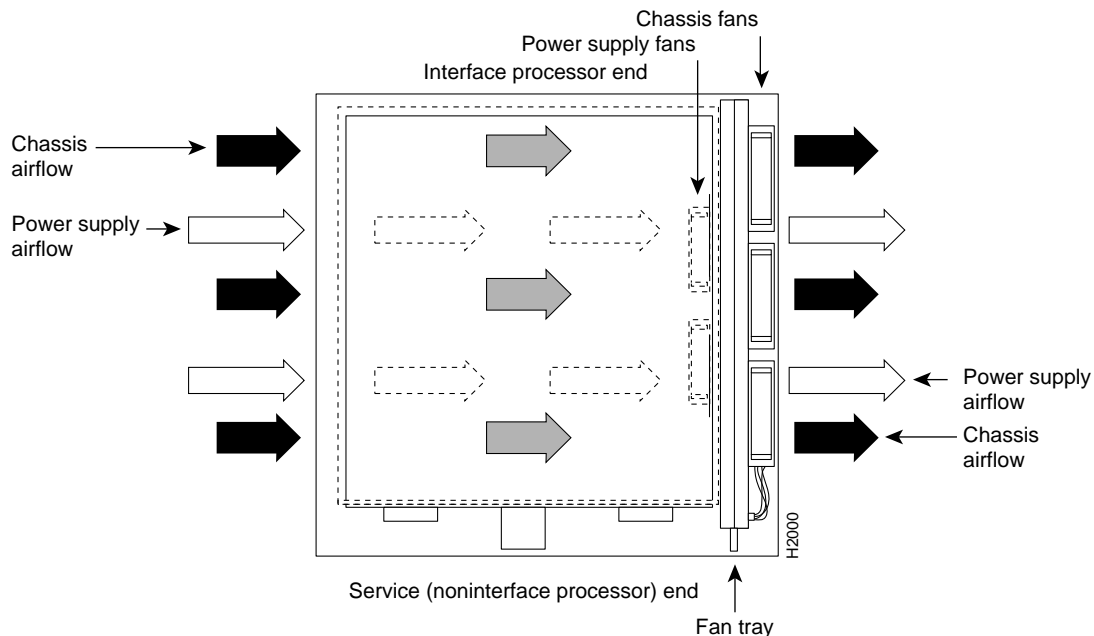
Description	Specification
High-speed backplane	1.067-gigabits per second (Gbps) CyBus, 4 interface processor slots, and 1 RSP1 slot
Dimensions (H x W x D)	10.5 x 17.5 x 17.0" (26.67 x 44.45 x 43.18 cm) Chassis depth including power cord and cable management brackets is 19" (48.26 cm)
Weight	Chassis only (including power supply and fan array): 46 lb (20.87 kg) Chassis fully configured with 1 RSP1 and 4 interface processors: 70 lb (31.75 kg)
Power dissipation	600W maximum configuration with AC-input power supply 600W maximum configuration with DC-input power supply
Heat dissipation	715W (2440 British thermal units [Btus]/hr)
Power distribution	75 amps (A) maximum @ +5 VDC, 15A maximum @ +12 VDC, 3A maximum @ -12 VDC, 5A maximum @ +24 VDC
AC-input rating	100 to 240 volts AC (VAC), wide input with power factor corrector (PFC); 9A maximum @ 100 VAC, 4A maximum @ 240 VAC (at 600W)
Frequency	50 to 60 Hz
DC-input rating	-40 volts DC (VDC) minimum in North America (-56 VDC in European Community) -48 VDC nominal in North America (-60 VDC in European Community) -52 VDC maximum in North America (-72 VDC in European Community) 20A maximum at -48 VDC and 16A maximum @ -60 VDC
DC-input cable	10 AWG (American Wire Gauge); recommended minimum wire gauge (you provide)
DC-input hold-up time	10 milliseconds (ms) of output after the DC input has been interrupted
Airflow	Side-to-side through the chassis using a variable-speed, 6-fan array
Temperature	32 to 104 F (0 to 40 C), operating; -4 to 149 F (-20 to 65 C), nonoperating
Humidity	10 to 90%, noncondensing
Agency approvals	Safety: UL 1950, CSA 22.2-No. 950, EN60950, EN41003, AUSTEL TS001, AS/NZS 3260, IEC 801-2, 3, 4, 5, and 6 EMI: FCC Class A, VCCI Class II, and CISPR 22 B (EN 55022) Conducted Emissions

Airflow Considerations

Figure 1-2 shows the chassis fan array and airflow in the Cisco 7505.

Figure 1-2 Cisco 7505 Fan Array and Airflow

Top view of router



Six individual axial fans draw cooling air through the chassis interior to maintain an acceptable temperature for the internal components. The fans draw air in through the inlet vents on the side of the chassis opposite the fans, across the processor modules and other internal components, and through the exhaust vents adjacent to the fans.

The sides of the chassis must remain unobstructed to ensure adequate airflow and prevent overheating inside the chassis. A temperature sensor on the RSP1 monitors the internal air temperature. The power supply has two fans for cooling.

For complete information on fan operation and environmental considerations related to fan speed, refer to the *Cisco 7505 Hardware Installation and Maintenance* publication. For information on ordering printed documentation or UniverCD, refer to the section “If You Need More Configuration Information,” in the chapter “Performing a Basic Configuration of the Cisco 7505.”

Airflow Considerations
