

Cisco 7600 Series Cisco **7609** Router—Enhanced 9-Slot Chassis

The Cisco 7609 Router is a high-performance router deployed at the network edge, where performance, IP services, redundancy, and fault resiliency are critical. Combined with a central route processor and forwarding engine, the Cisco 7609 Router provides 30-Mpps forwarding rates and up to 256 Gbps of total throughput. This versatile Cisco 7600 Series system scales WAN connectivity from OC-48/STM-16 to DS0 and LAN connectivity from 10 Gigabit Ethernet through 10 Mbps Ethernet. The Cisco 7609 delivers these capabilities while implementing high-touch, hardware-accelerated IP services through the Cisco Parallel Express Forwarding (PXF) network processor.

The Cisco 7609 delivers nine slots of optical LAN, WAN, and MAN networking at the network edge, enabling service providers to offer high-value, differentiated services. It provides enterprises with the ability to deploy the advanced network infrastructure necessary to succeed in demanding, high-traffic environments.

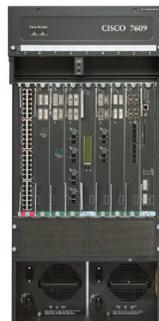
As part of the Cisco 7600 Series, the Cisco 7609 Router is the successor to the original 9-slot chassis (OSR-7609). This enhanced chassis delivers design improvements that incorporate redundant, tiered-speed fan trays with configurable options for route processor, switch fabric, and power supply redundancy.

The Cisco 7609 incorporates service provider and high-end enterprise requirements. Line cards are vertically mounted for efficient cooling with front-to-back airflow. Standard or extended cable-tray inserts provide unrestricted management of either fiber/coaxial or multiple conductor types with up to forty-eight 10/100 cables per slot. Two chassis can be installed per 7-foot rack.

As with all Cisco 7600 Series routers, the Cisco 7609 chassis accommodates a broad selection of line cards supporting numerous applications, including:

- Optical Services Modules (OSMs): OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 POS, OC-12/STM-4 ATM, Gigabit Ethernet WAN, Channelized T3 (CT3), and OC12/STM-4
- FlexWAN Module: Supporting Cisco 7200 Series and 7500 Series WAN port adapters for DS0 to OC-3
- LAN Ethernet Modules: 10/100 Mbps, Gigabit Ethernet, and 10 Gigabit Ethernet
- Services Modules: Firewall, Network Analysis, Content Switching, and SSL

Figure 1
 Cisco 7609 Router





Providing the foundation for a powerful combination of speed and services, the Cisco 7609 Router is an outstanding choice for multiple applications. Whether deployed as a high-speed WAN aggregator for peering or for metropolitan Ethernet aggregation and uplinks, the Cisco 7609 meets the requirements for critical network applications.

Feature Summary

Cisco 7609 System Features

- 30-Mpps hardware-based Cisco Express Forwarding
- 30-Mpps hardware-based access control lists (ACLs), classification, policing, and marking
- 256 Gbps total throughput

Cisco 7609 Chassis Features

- 21RU (36.75 in.; 93.3 cm) high, up to 2 chassis per 7-foot rack
- 9 configurable interface slots
- 1+1 route processor, switch fabric, and power supply protection capability
- 1+1 tiered-speed fan design (standard)
- Cable management tray options for fiber/coaxial and dense 10/100 cable configurations
- Single-side connection management for both interface and power terminations
- Front-to-back airflow

Cisco 7609 Technical Specifications

- 9-slot chassis
- NEBS Level 3 compliance
- Minimum route processor requirement; one Cisco Catalyst® 6500 Series Supervisor Engine 2 with MFSC-2
- Dimensions (H x W x D): 36.75 x 17.2 x 20.7 in. (93.3 x 43.1 x 53.3 cm)
- Power requirements:
 - 208 to 240V AC (recommended)
 - –48 to –60V DC (4000W AC supplies require 30A input circuits)
- Weight: 121 lb/54.9 kg (chassis only); 270 lb/122.5 kg (full configuration)
- Mean time between failure (MTBF): 7 years for system configuration
- Environmental conditions:
 - Operating temperature: 32 to 104°F (0 to 40°C)
 - Storage temperature: –4 to 149°F (–20 to 65°C)
 - Relative humidity, operating: 10 to 85%, non-condensing
 - Relative humidity, storage: 5 to 95%, non-condensing
 - Operating altitude: –500 to 6500 ft
- Minimum software release: Cisco IOS®, Software Release 12.1(13)E1



Table 1 Cisco 7609 Chassis Ordering Information

Part Number	Description
Cisco 7609 Router bundle components	Enhanced 9-slot chassis (includes redundant tiered-speed fan trays, cable management tray with standard and extended depth inserts, and mounting kit), Cisco Catalyst 6500 Series Supervisor Engine 2 with MSFC-2 (WS-C6K-S2U-MSFC2 with 512 MB DRAM), 64 MB PCMCIA Flash memory, Inter-domain Routing License, and a single AC or DC power supply (AC supplies ship with fixed power cords)
7609-AC-BUN	Cisco 7609 chassis bundle, as listed above, with 4000W AC power supply (U.S. or international options; 30A circuit required)
7609-DC-BUN-2500W	Cisco 7609 chassis bundle, as listed above, with 2500W DC power supply
Spare Units (denoted by "=")	
CISCO7609=	Spare Cisco 7609 enhanced service-provider chassis (includes redundant tiered-speed fan trays, cable management tray with standard and extended depth inserts, and mounting kit)
WS-CAC-4000W-US=	Spare AC power supply for the Cisco 7609 chassis (30A circuit required); U.S./Japan cord attached
WS-CAC-4000W-INT=	Spare AC power supply for Cisco 7609 chassis (30A circuit required); international cord attached
WS-CDC-2500W=	Spare DC 2500W supply
FAN-TRAY-09=	Spare fan tray for the Cisco 7609 chassis (can be used as the first or second tray)
CABLETRAY-09=	Spare cable tray assembly with standard and extended depth inserts
KIT-MNTG-09=	Spare mounting kit for the Cisco 7609 chassis
CLK-7600=	Clock card for the Cisco 7609 chassis

Regulatory Compliance

- CE marking
- Safety
 - UL 60950
 - IEC 60950
 - EN 60950
 - CAN/CSA-C22.2 No. 60950
 - AS/NZS 3260
- EMC
 - FCC Part 15 (CFR 47) Class A
 - ICES-003 Class A
 - EN55022 Class A
 - CISPR22 Class A
 - AS/NZS 3548 Class A
 - VCCI Class A

- EN55024
- ETS300 386
- EN50082-1
- EN61000-3-2
- EN61000-3-3
- EN61000-6-1
- Industry standard
 - GR-63-Core NEBS Level 3 (pending)
 - GR-1089-Core NEBS Level 3 (pending)
 - ETSI 300 019 Storage Class 1.1
 - ETSI 300 019 Transportation Class 2.3
 - ETSI 300 019 Stationary Use Class 3.1

Service and Support

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For More Information

For more information about Cisco service and support programs and benefits, visit:

<http://www.cisco.com/en/US/support/index.html>

For more information about Cisco 7600 Series routers, contact your Cisco account representative or visit:

<http://www.cisco.com/go/7600>

For ordering information, visit:

http://www.cisco.com/public/ordering_info.shtml



Corporate Headquarters
 Cisco Systems, Inc.
 170 West Tasman Drive
 San Jose, CA 95134-1706
 USA
www.cisco.com
 Tel: 408 526-4000
 800 553-NETS (6387)
 Fax: 408 526-4100

European Headquarters
 Cisco Systems International BV
 Haarlerbergpark
 Haarlerbergweg 13-19
 1101 CH Amsterdam
 The Netherlands
www-europe.cisco.com
 Tel: 31 0 20 357 1000
 Fax: 31 0 20 357 1100

Americas Headquarters
 Cisco Systems, Inc.
 170 West Tasman Drive
 San Jose, CA 95134-1706
 USA
www.cisco.com
 Tel: 408 526-7660
 Fax: 408 527-0883

Asia Pacific Headquarters
 Cisco Systems, Inc.
 Capital Tower
 168 Robinson Road
 #22-01 to #29-01
 Singapore 068912
www.cisco.com
 Tel: +65 6317 7777
 Fax: +65 6317 7799

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