

# Cisco 7600 Series Internet Router

## Cisco 7606 Chassis

Extending Performance, Versatility, and Reliability at the Optical Edge

### Cisco 7606 Internet Router Chassis

The Cisco 7606 Internet Router is a compact, high-performance router designed for deployment at the network edge and in the data center, where performance and services are necessary to meet the requirements of both enterprises and service providers. The Cisco 7606 delivers both, providing a forwarding rate of 30 Mpps, and 160-Gbps total throughput while delivering high-touch, hardware-accelerated IP services via Cisco Parallel Express Forwarding (PXF) IP services processor technology.

Figure 1 Cisco 7606 Chassis



One of the Cisco 7600 Series Internet routers, the Cisco 7606 delivers optical LAN, WAN, and metropolitan-area network (MAN) networking at the network edge and in the Internet data center (IDC). The Cisco 7606 enables service providers to offer high-value, differentiated services, and enterprises to deploy the advanced network infrastructure necessary to succeed in high-traffic environments.

Providing performance and reliability, the Cisco 7606 offers 96 Mpps in distributed forwarding, with options for redundant route processors and power supplies. The inclusion of two Gigabit Ethernet ports on the Cisco Supervisor 2 with the multilayer switch feature card 2 (MSFC-2) route processor used in the Cisco 7606 eliminates the need to use a line-card slot for uplink ports. The result of this design is more efficient use of available line-card slots and increased deployment flexibility. Four Gigabit Ethernet ports are available for use in dual-route processor configurations.

Optical Services Modules for the Cisco 7600 Series are available with interface speeds ranging from OC-3 to OC-48, and the Cisco 7603 can also utilize the Cisco FlexWAN module (WS-X6182-2PA) to take advantage of the majority of Cisco 7200 and 7500 port adapters for terminating DS0 to OC-3 speeds. By utilizing the Cisco Catalyst® 6000 Series of Ethernet line

cards, in conjunction with the OSM and FlexWAN, the Cisco 7600 can scale WAN connectivity from DS0 to OC-48 and LAN connectivity from 10-Mbps Ethernet through 10-Gigabit (Gbps) Ethernet.

Understanding the need to use rack space efficiently, the Cisco 7606 was designed to be a compact 12.25 inches tall (seven-rack unit [RU]), with single-side connection management for both interface and power terminations. This setup allows placement of up to six Cisco 7606 units per standard 7-foot rack.

With a powerful combination of speed and services in a compact form factor, the Cisco 7606 is an outstanding choice for multiple applications. Whether deployed as a high-speed WAN aggregator, for peering, or for metropolitan Ethernet aggregation and uplink, the Cisco 7600 meets requirements for redundancy, high availability, and rack density. In the point-of-presence (POP) data center or the metropolitan network, the Cisco 7606 sets new standards as part of the industry-leading Cisco 7600 Series of Internet routers.

### Quick-Look Feature Summary

#### Cisco 7606 Chassis Features

- Seven-RU (12.25-inch) compact chassis, up to 6 chassis per 7-foot rack
- Two interface slots plus two supervisor-mounted Gigabit Ethernet ports (gigabit interface controllers [GBICs])
- Network Equipment Building Systems (NEBS) Level 3 compliance
- 1+1 route processor protection capability
- 1+1 power supply protection option, AC or DC
- Single-side connection management for both interface and power terminations
- Side-to-side airflow

#### Cisco 7606 System Features

- Hardware-based Cisco Express Forwarding (CEF) at 30 Mpps (CEF, access control lists [ACLs], classification, shaping, filtering, marking, and so on)
- 160-Gbps total throughput
- Up to 16-Gbps capacity per slot
- Interface flexibility for Packet over SONET (POS), Channelized optical, Ethernet, and ATM connectivity
- **To order, visit:** [http://www.cisco.com/public/ordering\\_info.shtml](http://www.cisco.com/public/ordering_info.shtml)

Table 1 Cisco 7606 Chassis Ordering Information

Part Number	Description
CISCO7606 Bundles	Cisco 7606, six-slot chassis (includes fan module, mounting kit, cable guide) with Supervisor 2 with MSFC-2, single AC or DC power supply, power entry module, and Border Gateway Protocol 4 (BGP4) license (AC bundles include power cord)
Spare Units	Note that "=" denotes a spare order
CISCO7606=	Cisco 7606 chassis, mounting kit, and cable guide
PWR-1900-AC= PEM-20A-AC=	950W AC power supply for CISCO7606 AC power entry module for CISCO7606
PWR-1900-DC= PEM-DC=	950W DC power supply for CISCO7606 DC power entry module for CISCO7606
CAB-AC20A-90L-US= CAB-AC16A-90L-EU= CAB-AC16A-90L-IN= CAB-AC-TWLK-90L-UK =	AC power cord (United States) AC power cord (Europe) AC power cord (International) AC power cord (US) w/NEMA6-20 plug
FAN-MOD-6=	Fan module for CISCO7606

Part Number	Description
KIT-MNTG-CG-6=	Mounting kit and cable guide for CISCO7606
CLK-7600=	Clock card for CISCO7606

## Technical Specifications

- Seven-RU (12.25-foot [31.11-cm]) chassis
- Six-slot chassis (minimum route processor requirement—one Supervisor 2 with MFSC-2)
- Dimensions (H x W x D): 12.25 x 17.37 x 21.75 inches (31.11 x 44.12 x 55.25 cm)
- Chassis weight: 40 lb (18.14 kg)  
Power-supply weight: 11 lb (4.99 kg)  
PEM weight: 2 lb (0.91 kg)
- Power requirements: 110 to 240 VAC or –48 to –60 VDC
- Mean Time Between Failure (MTBF): seven 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%, noncondensing
  - Relative humidity, storage: 5 to 95%, noncondensing

- Operating altitude: –500 to 10,000 ft

## Regulatory Compliance

### 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

### Regulatory Compliance

- UL 60950
- IEC 60825-1, -2
- IEC 60950
- EN 60950
- EN 60825-1, -2
- CAN/CSA-C22.2 No. 60950-00
- AS/NZS 3260-1993
- 21CFR1040

### Safety and Environmental Standard Compliance

- GR-63-Core NEBS Level 3



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