DATA SHEET

CISCO 7606 CHASSIS

Extending Performance, Versatility, and Reliability at the Optical Edge

CISCO 7606 ROUTER

The Cisco® 7606 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 centrally and up to 240Mpps distributed with 480-Gbps total throughput while delivering high-touch, hardware-accelerated IP services.

Figure 1
Cisco 7606 Chassis

One of the Cisco 7600 Series Routers, the Cisco 7606 delivers optical LAN, WAN, and metropolitan-area network (MAN) networking at the network edge and in the 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 240 Mpps in distributed forwarding, with options for redundant route processors and power supplies. The inclusion of two Gigabit Ethernet ports on the Cisco Supervisor 720 with the multilayer switch feature card 3 (MSFC-3) 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 7606 can also utilize the Cisco Enhanced FlexWAN module 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-192 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 Routers.

• Shared Port Adapter and SPA Interface Processors: T1/E1, channelized T1/E1, T3/E3, Channelized T3, OC-3/STM-1, OC-12/STM-4 and OC-48/STM-16 POS, OC-192/STM-64 POS, OC-3/STM-3 ATM, OC-12/STM-4 ATM, OC-48/STM-16 ATM, Fast Ethernet, Gigabit Ethernet, and 10 Gigabit Ethernet.

• Optical Service Modules: OC-3/STM-1, OC-12/STM-4 and 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 and 7500 WAN port adapters for DS0 to OC-3

• LAN Ethernet Modules: 10/100 Mbps, Gigabit Ethernet, and 10-Gigabit Ethernet

• Services Modules: IPSec, Firewall, Network Analysis, Content Switching, and SSL

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)
- Up to 240Mpps distributed (requires DFCs)
- 480-Gbps total throughput

Table 1. Cisco 7606 Chassis Ordering Information

Part Number	Description

Part Number	Description
7606-AC-BUN	Cisco 7606, six-slot chassis (includes fan module, mounting kit, cable guide) with Supervisor 2 with MSFC-2, single AC power supply, power entry module, and Border Gateway Protocol 4 (BGP4) license (AC bundles include power cord)
7606-DC-BUN	Cisco 7606, six-slot chassis (includes fan module, mounting kit, cable guide) with Supervisor 2 with MSFC-2, single DC power supply, power entry module, and Border Gateway Protocol 4 (BGP4) license (AC bundles include power cord)
7606-SUP720-PS	This bundle includes a Cisco 7606 chassis, equipped with high-speed fan, 1 Supervisor Engine 720, 1 1900W AC power supply and AC PEM. The 1900W AC power supply may be changed to DC for a nominal fee. Additional memory and Cisco IOS® are optional.
7606-SUP7203B-PS	This bundle includes a Cisco 7606 chassis, equipped with high-speed fan, 1 Supervisor Engine 720-3B, 1 1900W AC power supply and AC PEM. The 1900W AC power supply may be changed to DC for a nominal fee. Additional memory and IOS are optional.
7606-2SUP7203B-2PS	This bundle includes a Cisco 7606 chassis, equipped with high-speed fan, 2 Supervisor Engine 720-3B, 2 1900W AC power supplies and AC PEMs. The 1900W AC power supplies may be changed to DC for a nominal fee. Additional memory and IOS are optional.
7606-SUP720XL-PS	This bundle includes a Cisco 7606 chassis, equipped with high-speed fan, 1 Supervisor Engine 720-3BXL, 1 1900W AC power supply and AC PEM. The 1900W AC power supply may be changed to DC for a nominal fee. Additional memory and IOS are optional.
7606-2SUP720XL-2PS	This bundle includes a Cisco 7606 chassis, equipped with high-speed fan, 2 Supervisor Engine 720-3BXL, 2 1900W AC power supplies and AC PEMs. The 1900W AC power supplies may be changed to DC for a nominal fee. Additional memory and IOS are optional.
Spare Units	**Note that "=" denotes a spare order**
CISCO7606=	Cisco 7606 chassis, mounting kit, and cable guide
PWR-1900-AC/6=	1900W AC power supply for CISCO7606
PEM-20A-AC=	AC power entry module for CISCO7606
PWR-1900-DC=	1900W DC power supply for CISCO7606
PEM-DC=	DC power entry module for CISCO7606
CAB-GSR16-US=	AC power cord (United States) with NEMAL6-20 Plug
CAB-GSR16-EU=	AC power cord (Europe)
CAB-AC16A-90L-IN=	AC power cord (International)
FAN-MOD-6=	Fan module for CISCO7606
FAN-MOD-6HS=	High Speed Fan Module for CISCO7606 Chassis (Required with SUP720)
KIT-MNTG-CG-6=	Mounting kit and cable guide for CISCO7606
CLK-7600=	Clock card for CISCO7606

TECHNICAL SPECIFICATIONS

- Seven-RU (12.25-inches [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 in. (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: 208 to 240 VAC recommended 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
- GR-1089-Core NEBS Level 3
- ETSI 300 019 Storage Class 1.1
- ETSI 300 019 Transportation Class 2.3

- ETSI 300 019 Stationary Use Class 3.1

Minimum Software Release

- Cisco IOS 12.1(10)E

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.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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