DATA SHEET

CISCO 7603 CHASSIS

Extending Performance, Versatility, and Reliability at the Optical Edge

CISCO 7603 ROUTER

The Cisco[®] 7603 Router is a small-form-factor, high-performance router designed for deployment at the network edge, where a combination of performance and services is necessary to meet the requirements of both enterprises and service providers. The Cisco 7603 delivers high performance with a forwarding rate of 15 Mpps, and 32 Gbps of bandwidth across the backplane while delivering high-touch, hardware-accelerated IP services via Cisco Parallel Express Forwarding (PXF) IP services processor technology.

Figure 1
Cisco 7603 Chassis

One of the Cisco 7600 Series Routers, the Cisco 7603 delivers optical LAN, WAN, and metropolitan-area network (MAN) networking with high-touch IP services at the network edge, enabling service providers and enterprises to "service enable" their networks at optical speeds. This creates opportunities for service providers to offer high-value, differentiated services, and for enterprises to develop the advanced network infrastructure necessary to succeed in the modern business environment.

The Cisco 7603 delivers performance in a compact (four-rack unit [RU]) three-slot chassis. The Cisco 7603 may be configured with a single route processor and two slots available for line cards or for high-availability and redundancy, with dual route processors and a single open line-card slot. The Cisco 7603 also supports redundant power supplies for increased reliability.

The inclusion of Gigabit Ethernet ports on the Cisco Supervisor 2 or Supervisor Engine 720 route processors 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. Along with the Cisco Catalyst[®] 6000 Series of Ethernet line cards, the Cisco 7600 can scale WAN connectivity from DS0 to OC-48 and LAN connectivity from 10-Mbps Ethernet through Gigabit Ethernet.

Understanding the need to use rack space efficiently, the Cisco 7603 was designed to be a compact 7-inch-tall (four RU) unit, with single-side connection management for both interface and power terminations. This setup allows placement of up to 11 Cisco 7603 units per standard 7-foot rack.

With a powerful combination of speed and services in a compact form factor, the Cisco 7603 is an outstanding choice for deployment in applications such as peering where a small number of interfaces is needed, in a Tier 2 or Tier 3 point of presence (POP) where space is critical but high-speed aggregation is necessary, or in the metropolitan area to provide high-performance Ethernet aggregation and uplink.

QUICK-LOOK FEATURE SUMMARY

Cisco 7603 Chassis Features

- Four RU (7-inch) compact chassis, up to 11 chassis per 7-foot rack

- Two interface slots plus two supervisor-mounted Gigabit Ethernet ports (gigabit interface converters [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 7603 System Features

- Hardware-based Cisco Express Forwarding (CEF) at 15 Mpps (CEF, access control lists [ACLs]), classification, shaping, filtering, marking, etc.)

- 32-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

Cisco 7603 System Restrictions

- WS-X6704-10GE, WS-X6724-SFP, WS-X6748-GE-TX, WS-X6748-SFP

Table 1.   Cisco 7603 Chassis Ordering Information

Chassis Bundles	Description
7603-AC-BUN	Cisco 7603, 3-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)
7603-DC-BUN	Cisco 7603, 3-slot chassis (includes fan module, mounting kit, cable guide) with Supervisor 2 with MSFC-2, single DC power supply, power entry module, and BGP4 license (AC bundles include power cord)
7603-SUP720-PS	This bundle includes a Cisco 7603 chassis, equipped with high-speed fan, 1 Supervisor Engine 720, 1 950W AC power supply and AC PEM. The 950W AC power supply may be changed to DC or the 1400W AC for a nominal fee. Additional memory and Cisco IOS® are optional.

Chassis Bundles	Description
7603-SUP7203B-PS	This bundle includes a Cisco 7603 chassis, equipped with high-speed fan, 1 Supervisor Engine 720-3B, 1 950W AC power supply and AC PEM. The 950W AC power supply may be changed to DC or the 1400W AC for a nominal fee. Additional memory and IOS are optional.
7603-SUP720XL-PS	This bundle includes a Cisco 7603 chassis, equipped with high-speed fan, 1 Supervisor Engine 720-3BXL, 1 950W AC power supply and AC PEM. The 950W AC power supply may be changed to DC or the 1400W AC for a nominal fee. Additional memory and IOS are optional.
Spare Units	**Note that "=" denotes a spare order**
CISCO7603=	Cisco 7603 chassis, mounting kit, and cable guide
PWR-950-AC=	950W AC power supply for Cisco 7603
PEM-15A-AC=	AC power entry module for Cisco 7603
PWR-950-DC=	950W DC power supply for Cisco 7603
PEM-DC/3=	DC power entry module for Cisco 7603
AC Power Cords for 950W Power Supply	
CAB-AC15A-90L-US=	AC power cord (United States)
CAB-AC10A-90L-EU=	AC power cord (Europe)
CAB-AC10A-90L-UK=	AC power cord (United Kingdom)
CAB-AC10A-90L-IL=	AC power cord (Italy)
CAB-AC-10A-90L-AU=	AC power cord (Australia)
PWR-1400-AC=	1400W AC Power Supply of Cisco 7603 (requires PEM-20AC+)
PEM-20A-AC+=	AC power entry module for PWR-1400-AC/Cisco 7603 (PWR-1400-AC requires a 20A circuit input)
AC Power Cords for 1400W Power Supply	
CAB-7513AC	AC POWER CORD NORTH AMERICA (110V)
CAB-7513ACA	AC POWER CORD (AUSTRALIA)
CAB-7513ACE	AC POWER CORD (EUROPE)
CAB-7513ACI	AC POWER CORD (ITALY)
CAB-7513ACU	AC POWER CORD (UK)
CAB-7513ACR	AC POWER CORD (ARGENTINA)
CAB-7513ACSA	AC Power Cord (South Africa)
CAB-ACS-10	AC Power Cord (Swiss) 10A
CAB-AC-2500W-US1	Power Cord, 250 VAC 20A, straight blade NEMA 6-20 plug, US
CAB-AC-C6K-TWLK	Power Cord, 250 VAC 16A, twist lock NEMA L6-20 plug, US
CAB-AC-2500W-EU	Power Cord, 250 VAC 16A, Europe
CAB-AC-2500W-INT	Power Cord, 250 VAC 16A, INTL
CAB-ACS-16	Power Cord, (Swiss) 16A
FAN-MOD-3=	Fan module for Cisco 7603
FAN-MOD-3HS=	High-speed fan module for Cisco 7603 (required for Sup720 configurations)
KIT-MNTG-CG-3=	Mounting kit and cable guide for Cisco 7603
CLK-7600=	Clock card for Cisco 7603

TECHNICAL SPECIFICATIONS

Physical Specifications

- Four-RU (7-inch) chassis

- Three-slot chassis (minimum route processor requirement-one Supervisor 2 with MFSC-2)

- Dimensions (H x W x D): 7 x 17.37 x 21.75 in., (17.78 x 44.12 x 55.25 cm)

- Weight: 27 lb (12.25 kg)

- Power requirements: 110 to 240 VAC, –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% non-condensing

    – Relative humidity, storage: 5 to 95% non-condensing

    – Operating altitude: –500 to 6500 ft
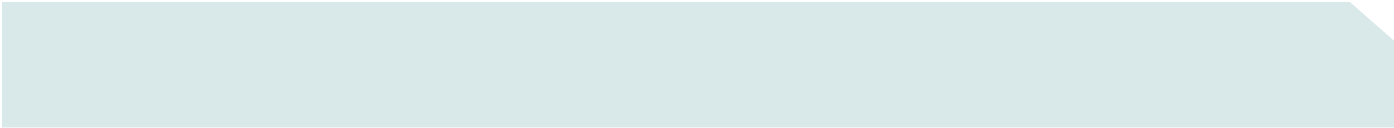
Regulatory Compliance

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

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- 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 (8a) E2-for Sup2 with MSFC2 configurations

- Cisco IOS 12.2 (14) SX-for Sup720 configurations

CISCO SYSTEMS