Data Sheet

Cisco 7400 Series Internet Router

The Cisco 7400 Series Internet Router is the highest performance single-rack unit (RU) router on the market. Its compact, stackable architecture is expressly designed for application specific routing deployments in service provider and enterprise networks. Taking advantage of the Parallel eXpress Forwarding (PXF) technology patented by Cisco Systems, the Cisco 7400 delivers a premium suite of hardware-accelerated network services.

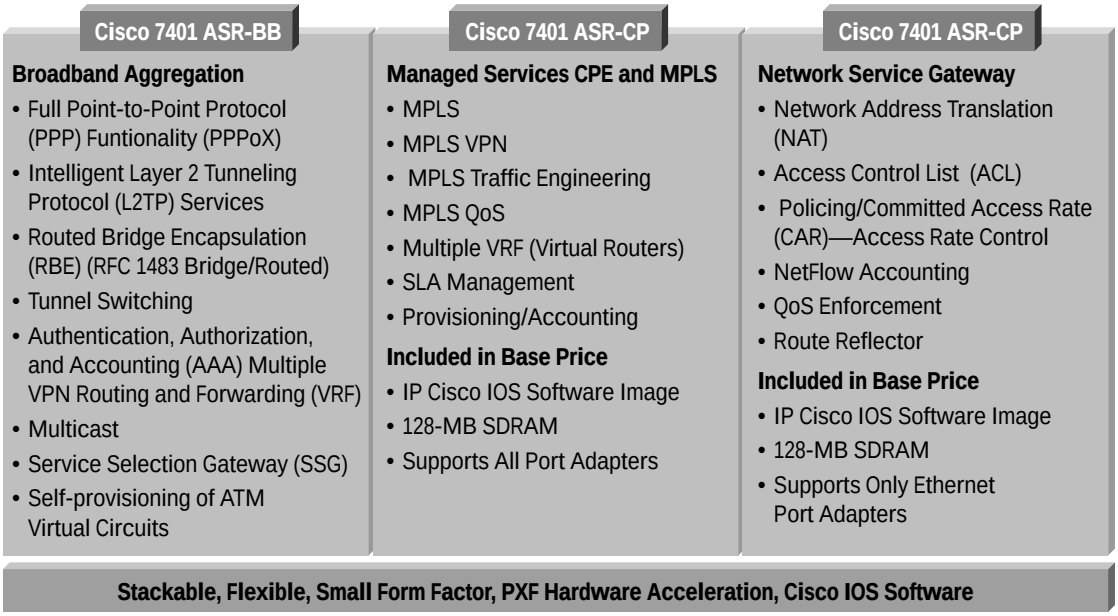
Key Benefits

- "Pay-as-you-grow" granularity with small, stackable form factor
- Highest service density and performance per 1RU in the industry
- High level of flexibility and versatility with wide choice of more than 40 modular interfaces

There are two Cisco 7400 models targeting specific market segments:

- Cisco 7401 ASR-BB—Broadband subscriber aggregation including xDSL, ISDN, Fiber to the Curb (FTTC), and wireless
- Cisco 7401 ASR-CP—Managed service (customer premises equipment [CPE] and customer leased equipment [CLE]) and full Multiprotocol Label Switching (MPLS) provider edge (PE) and MPLS virtual private network (VPN) services
- Cisco 7401 ASR-CP—Network Appliance for quality-of-service (QoS) enforcement or hardware-accelerated services (PXF)

Application specific routing focuses on a subset of the vast array of services traditionally offered by Cisco routers. This application focus enables the Cisco 7400 products to deliver a rich suite of services and performance tailored for their specific market applications. The Cisco 7400 includes three models:



Enterprise and service provider customers continue to drive the need for optimizing operational and management costs to increase revenue opportunities. The Cisco 7400 addresses these requirements by integrating functions previously performed by combinations of general-purpose platforms with a combination of scalable performance and PXF-enabled hardware-accelerated service delivery with efficient use of rack space. The Cisco 7400 sets new standards in rack density and modular performance per rack unit. Customers can now simplify their networks with a single platform that delivers new revenue-generating opportunities through network-layer, application-specific services including security, QoS, and traffic management. The stackability of this product provides the opportunity to "pay as you grow" your customer base in a modular and scalable fashion. It also provides the opportunity to redeploy the stack to other parts of the network as demand changes.

Key Features and Benefits

The Cisco 7400 delivers exceptional price/performance for enterprises and service providers. With its combination of scalable performance, density, and low per-port pricing, the Cisco 7400 extends network-layer capabilities to a wide range of network configurations and environments. Customers gain the advantages of high-performance, network-layer switching and services, including security, QoS, and traffic management to more locations throughout the network.

- Form factor (stackable 1RU high, low power (under 50W), front-to-back airflow
- Hardware-accelerated network application services with Cisco PXF processing
- Cost-effective Gigabit Ethernet to Gigabit Ethernet Layer 2-7 network services
- Ideal new world CPE with full MPLS customer-edge and MPLS VPN support

- Flexible WAN connectivity supporting over 40 interfaces including serial, channelized, ISDN, Frame Relay, ATM, IP, and 64K to OC3

The Cisco 7400 delivers the full suite of Cisco IOS® Software services for managing network security, allocating QoS among applications or users, and providing value-added services such as NetFlow accounting and encryption. QoS applications such as CAR, Weighted Random Early Detection (WRED), and Weighted Fair Queuing (WFQ) can be flexibly applied to provide precedence across IP addresses, applications, or specific users with a high level of granularity.

The Cisco 7400 offers scalable density with a wide range of interfaces including:

- Ethernet, Fast Ethernet, and Gigabit Ethernet
- Serial and multichannel T1/E1and T3/E3 interfaces and packet-over-SONET (POS) OC3
- OC3/STM-1 POS, T3/E3 and OC3/STM-1 ATM, and T1/E1 Inverse Multiplexing over ATM (IMA)
- ISDN Primary Rate Interface (PRI), Basic Rate Interface (BRI), and High-Speed Serial Interface (HSSI)

The Cisco 7400 uses the same port adapters as the Cisco 7500 and the Cisco 7200 VXR, protecting customer investment in interfaces and simplifying sparing.

The Cisco 7400 sets new standards in price, performance, and rack density, meeting requirements for high-performance Layer 3 services at an affordable price. The Network Services Engine (NSE-1) processing complex of the Cisco 7400 takes advantage of parallel processing to offer unprecedented price and performance. NSE-1 delivers wire-rate OC3/STM-1 throughput while running concurrent high-touch WAN edge services. NSE-1 takes advantage of the new Cisco PXF technology. It is the first Cisco processing engine to offer integrated hardware acceleration, which increases the performance of the Cisco 7400 system by 50 to 300 percent for combined "high-touch" edge services compared to systems without PXF technology.

Cisco 7400 Chassis

The Cisco 7400 delivers high-performance, application-specific routing in a small single-rack unit, front-to-back airflow package. The chassis includes the following features:

- One standard Cisco 7200/7500 port adapter slot
- AC, DC48V, DC24V or dual DC48V power supply
- 1RU high chassis with front-to-back airflow
- PXF processor for hardware-accelerated services such as network address translation (NAT), access control list (ACL), NetFlow accounting, Low Latency Queuing (LLQ), and CAR
- Two flexible 10/100/1000-Mbps Ethernet ports (10/100 in RJ45 and Gigabit Interface Converter [GBIC] for Gigabit Ethernet)
- Dry relay contact for instant alarms
- One console and one auxiliary port (RJ45)
- One compact PCMCIA Flash disk slot

Reliability, Availability, Serviceability, and Manageability

The Cisco 7400 handles mission-critical applications. To ensure high system availability the Cisco 7400 supports:

- Dual current-sharing (DC) power supplies
- Online insertion and removal (OIR) of port adapters so that interfaces can be added, removed, or replaced without service interruption
- PC Flash memory card for storing backup software images and configuration files
- Cisco IOS Software Hot Standby Router Protocol (HSRP) for fast cutover to backup routers in the event of system or link failures
- Environmental monitors with levels of escalation so that operators can take corrective actions prior to system shutdowns

The Cisco 7400 also includes an HTML-based management tool to simplify router configuration and management. Customers can use a Web browser to navigate the command-line interface (CLI) with hot links. With a logical view of the hardware configuration, customers can point and click on interfaces to check status or modify configurations. Customers can also use hot links to perform basic troubleshooting operations such as verifying software versions.

Stackability

The following features of the Cisco 7400 support stackability:

- Front-to-back air flow
- Fully serviceable from one side (including power)
- Low power and heat dissipation
- Dry relay contact for telco alarms
- NEBS compliant with a depth of only 12 in.

Ready for Real-World Applications

With the Cisco 7400 Series, Internet service providers (ISPs) can more profitably support large numbers of subscribers requiring fast WAN connections at remote points of presence (POPs). In WAN environments, the Cisco 7400 offers high-density, high performance, and feature-rich serial and channelized interfaces as well as high-availability features for a low price per port. Its compact size of just 1RU conserves precious rack space. With support for dual power, OIR, and field-replaceable components, ISPs can minimize network downtime and maintain revenue-generating applications and services such as QoS that can be flexibly applied to maximize WAN resources.

Service providers can further leverage the Cisco 7400 to extend enterprise networks and increase revenue opportunities through differentiated service offerings such as VPNs and Web hosting. Bundled services, including switched LAN and Internet connectivity, can be offered to multiple customers while being provisioned from the same physical platform.

Enterprise regional offices or service provider CPE environments can benefit from multiservice integration (data, voice, and video) using the Cisco 7400. The Cisco 7400 allows a single network element to be provisioned and managed, thus significantly reducing costs and capital outlay.

Broadband Subscriber Aggregation Services

The Cisco 7400 can aggregate thousands of broadband subscribers to enable value-added IP services. In service provider networks, it can accept a large concentration of broadband subscriber traffic from a variety of devices such as DSL access multiplexers (DSLAMs), cable modem termination systems (CMTSs), and wireless concentrators. The Cisco 7400 can also efficiently terminate ISDN PRI and BRI traffic, making it an ideal modular approach to building an IDSL or ISDN infrastructure. When deployed by carriers and cable operators in regional data networks, the Cisco 7400 enables cost-effective, highly scalable, secure wholesale access for creating and deploying value-added IP services. Software features for Cisco 7400 broadband aggregation include:

- Point-to-Point (PPP) over ATM, PPP over Ethernet, and PPP over virtual LAN (VLAN)
- Routed bridge encapsulation (RBE) for RFC 1483 permanent virtual circuits
- Virtual routing for high-density circuit termination with increased security, flexibility, and scalability
- Password Authentication Protocol (PAP)/Challenge Handshake Authentication Protocol (CHAP), Remote Dial-In User Service (RADIUS), and Terminal Access Controller Access Control System (TACACS) authentication
- Intelligent Layer 2 Tunneling Protocol (L2TP) support
- Differentiated, value-added services with hardware-accelerated PXF services along with flexible modular interfaces for traffic aggregation, including OC-3, DS-3, Fast Ethernet and Gigabit Ethernet, packet over SONET (POS), and more
- Ideal for small and medium density aggregation for network operators, competitive local exchange carriers (CLECs), and Internet service providers (ISPs)
- Multiprotocol Label Switching (MPLS), virtual private network (VPN), and full L2TP to MPLS support

Managed Services and CPE

The Cisco 7400 complements the Cisco 7200 VXR Series in the managed services and CPE markets. With over 40 different modular interfaces or port adapters that it shares with the Cisco 7200 VXR, the Cisco 7400 is an ideal upgrade to existing 1RU platforms, such as the Cisco 2600 or 3620, where high performance is required in a confined space.

The Cisco 7400 is ideal for managed services where each end customer is given their own router, and the service provider manages it for them. In many cases, stacks of routers are needed. In such environments space, airflow, and heat/power dissipation is an issue. The Cisco 7400 delivers the performance of the Cisco 7200 VXR in one-third the space, with one-fifth of the power, and front-to-back airflow.

Cisco 7400 features include:

- ATM, Frame, Dynamic Packet Transport (DPT), POS, channelized and serial interfaces from 64K to OC3/STM-1

- Full range of traditional Cisco routing protocols including Routing Information Protocol (RIP), RIP version 2, Interior Gateway Routing Protocol (IGRP), Enhanced IGRP (EIGRP), Intermediate System-to-Intermediate System (IS-IS), and Border Gateway Protocol (BGP)
- Virtual routing for high-density circuit termination with increased security, flexibility, and scalability
- Ideal for small and medium density aggregation for network operators, CLECs, and ISPs
- MPLS VPN, MPLS provider edge and full L2TP to MPLS support
- Stackability (50W, front-to-back airflow, single-side management)
- Differentiated, value-added services with hardware-accelerated PXF services along with flexible modular interfaces for traffic aggregation, including OC-3/STM-1, T3/E3, Fast Ethernet and Gigabit Ethernet, POS, and more

Cisco 7400 in the Appliance Market

Cisco IOS Software VPN services (including L2F, L2TP, and generic routing encapsulation [GRE] tunneling features) combined with security features, high-speed processing power, and unparalleled connectivity options make the Cisco 7400 an ideal choice for services gateway applications. Enterprises and ISPs use the Cisco 7400 as the preferred CPE for a wide variety of applications.

The following is a list of hardware accelerated Parallel Express Forwarding (PXF) services supported on Cisco 7400:

- Network address translation (NAT)
- Access control list (ACL)
- Cisco Express Forwarding (CEF)
- NetFlow accounting and export
- LLQ
- Class-based Weighted Fair Queuing (CBWFQ)
- Class-based Weighted Random Early Detection (CBWRED)
- Policing/CAR

Summary

The Cisco 7400 offers enterprise and service provider customers a cost-effective, single-platform solution with the high performance, density, availability, and scalability to be deployed across the network from enterprise CPE to POP environments. By leveraging the multifunction capabilities of the Cisco 7400, customers can simplify their network architecture, significantly reducing costs and increasing revenue opportunities through value-added services.

Specifications

Hardware

Table 1 Technical Specifications for Cisco 7401

Description	Cisco 7401 ASR-BB, Cisco 7401 ASR-CP	Cisco 7401 ASR-GW
Supported network interfaces	• Ethernet 10BaseT and 10BaseFL • Fast Ethernet 100BaseT (RJ-45 and MII) • Synchronous serial • Channelized T1/E1 ISDN PRI • Channelized T3/E3 • Serial (T1, E1, T3, E3) • ISDN BRI • ATM enhanced (T3/E3, OC3, STM1) • ATM-CES • POS OC3/STM1 • Voice-over-IP gateway to PSTN	• Ethernet 10BaseT and 10BaseFL • Fast Ethernet 100BaseT
Voice-over-IP gateway to PSTN	• Ethernet 10BaseT and 10BaseFL	• Fast Ethernet 100BaseT
Power supply options	• AC, DC48V, DC24V and Dual DC48V	• Same
Port adapter slots	• 1	• Same
Onboard Ethernet ports	• Two 10/100/1000 ports • (two RJ45 or two GBIC interfaces)	• Same
Network processing engine	• Based on NSE-1 fixed configuration • (375 MHz RM7K with PXF processor)	• Same
PCMCIA Flash memory card (one slot)	• 64 MB, 128 MB	• Same
Standard components	• Front-to-back airflow • One rack unit • Single-side access • Dry relay alarm contact	• Same

Table 2 Power Requirements for Cisco 7401

Description	Cisco 7401ASR-BB, Cisco 7401ASR-CP, Cisco 7401ASR-GW
AC-input power	• 75 VA max. (single supply configuration available only)
AC-input voltage rating	• 100–240 VAC wide input with power factor correction
AC-input current rating	• Rated for 2A • Not to exceed 1.0A max. at 100 VAC and 0.5A max. at 240 VAC
AC-input frequency rating	• 50/60 Hz
AC-input cable	• 18 AWG 3-wire cable, with 3-lead IEC-320 receptacle on the power supply end and a country-dependent plug on the power source end
DC-input power	• 75 VA max. (single or dual power supply configuration)
DC-input voltage rating	• –48 VDC nominal in North America, –60 VDC nominal in the European Community • Maximum range is –40.5 to 72 VDC (75 VDC for 5 mS) • Or, with optional 24 VDC power supply; +24 VDC nominal • Maximum range +20 to +36 VDC
DC-input current rating	• Rated for 3A • Not to exceed 1.6A max. at –48 VDC • Not to exceed 2.0A max. at –40.5 VDC • (50VA/–54 VDC = 1.0A typical draw) • With redundant power supply, individual line currents are added to give the above numbers • +24 VDC input current is 3.0A at +24 VDC, 3.75A at +20 VDC • (50 VA/28 VDC = 1.8A typical draw) • Rated for 5A
DC-input cable	• 18 AWG recommended minimum, with at least 3 conductors rated for at least 140 F (60 C)
Airflow	• ~80 cfm
Power dissipation	• 75W max. configuration
Heat dissipation	• 50W (170 BTU) Typical, 255 BTU maximum

Table 3 Physical and Environmental Specifications

Description	Cisco 7401ASR-BB, Cisco 7401ASR-CP, Cisco 7401ASR-GW
Temperature	• 32 to 104 F (0 to 40 C), operating; –4 to 149 F (–20 to 65 C), storage
Humidity	• 10 to 90% noncondensing
Dimensions (H x W x D)	• 1.72 in. x 17.3 in. x 11.80 in. (4.37 cm x 43.9 cm x 30 cm)
Weight	• Chassis fully configured with a port adapter ~ 10.5 lb (4.76 kg)

Table 4 Regulatory Standards Compliance

Description	Cisco 7401 ASR-BB, Cisco 7401 ASR-CP, Cisco 7401 ASR-GW
Regulatory Compliance	• Products bear CE1 marking indicating compliance with the 99/5/EC directive, which includes the following safety and EMC standards
Safety	• UL2 1950, CSA3-C22.2 No. 950, EN4 60950, IEC5 60950, TS6 001, AS/NZS7 3260, IEC560825, EN460825, 21CFR81040
EMC	• FCC9 Part 15 (CFR 47) Class A, ICES10-003 Class A, EN55022 Class B, CISPR22 Class B, AS/NZS 3548 Class B, and VCCI Class B1112 • EN55024, ETS300 386-2, EN50082-1
NEBS	• GR-1089-Core NEBS Level 3 Requirements, GR-63-Core NEBS Level 3 Requirements

Software

Table 5 Software Specifications for Cisco 7401

Description	Cisco 7401
Software requirement	• Cisco IOS Software Release 12.2(1)T or later

Ordering Information

Where to buy Cisco products, visit

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

Product and Part Numbers

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
Cisco 7400 Bundles	
Cisco 7401, 1-slot chassis, power supply, 256 MB SDRAM, broadband software	CISCO7401ASR-BB
Cisco 7401, 1-slot chassis, power supply, 128 MB SDRAM, CPE software	CISCO7401ASR-CP
Cisco 7400 Memory Options	
Cisco 7400 PCMCIA Flash disk, 64 MB	MEM-COMP-FLD64M
Cisco 7400 PCMCIA Flash disk, 64 MB spare	MEM-COMP-FLD64M=
Cisco 7400 PCMCIA Flash disk, 128 MB	MEM-COMP-FLD128M
Cisco 7400 PCMCIA Flash disk, 128 MB spare	MEM-COMP-FLD128M=
256 MB memory for Cisco 7400	MEM-7400ASR-256MB
256 MB memory for Cisco 7400, spare	MEM-7400ASR-256MB=
512 MB memory for Cisco 7400	MEM-7400ASR-512MB
512 MB memory for Cisco 7400, spare	MEM-7400ASR-512MB=
Cisco 7400 Transceiver Modules	
Gigabit Interface Converter (GBIC) for 1000BaseLX standard	GBIC-LX/LH
GBIC for 1000BaseLX standard	GBIC-LX/LH=
GBIC for 1000BaseSX (short wavelength)	GBIC-SX=
Cisco 7401 ASR-BB, Cisco 7401 ASR-CP Port and Service Adapters	
2-port Fast Ethernet 100BaseFX port adapter	PA-2FE-FX
2-port Fast Ethernet 100BaseFX port adapter	PA-2FE-FX=
2-port Fast Ethernet 100BaseTX port adapter	PA-2FE-TX
2-port Fast Ethernet 100BaseTX port adapter	PA-2FE-TX=
1-port Fast Ethernet 100BaseFX port adapter	PA-FE-FX
1-port Fast Ethernet 100BaseFX port adapter	PA-FE-FX=
1-port Fast Ethernet 100BaseTX port adapter	PA-FE-TX
1-port Fast Ethernet 100BaseTX port adapter	PA-FE-TX=
4-port Ethernet 10BaseT port adapter	PA-4E
4-port Ethernet 10BaseT port adapter	PA-4E=
8-port Ethernet 10BaseT port adapter	PA-8E
8-port Ethernet 10BaseT port adapter	PA-8E=

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
5-port Ethernet 10BaseFL port adapter	PA-5EFL
5-port Ethernet 10BaseFL port adapter	PA-5EFL=
4-port serial port adapter, enhanced	PA-4T+
4-port serial port adapter, enhanced	PA-4T+=
8-port serial, V.35 port adapter	PA-8T-V35
8-port serial, V.35 port adapter	PA-8T-V35=
8-port serial, 232 port adapter	PA-8T-232
8-port serial, 232 port adapter	PA-8T-232=
8-port serial, X.21 port adapter	PA-8T-X21
8-port serial, X.21 port adapter	PA-8T-X21=
1-port HSSI port adapter	PA-H
Port adapter: 1-port HSSI	PA-H=
2-port HSSI port adapter	PA-2H
Port adapter: 2-port HSSI	PA-2H=
1-Port ATM enhanced DS3 port adapter	PA-A3-T3
1-Port ATM enhanced DS3 port adapter (spare)	PA-A3-T3=
1-port ATM enhanced E3 port adapter	PA-A3-E3
1-port ATM enhanced E3 port adapter (spare)	PA-A3-E3=
8-port ATM inverse multiplexer E1 (120-ohm) port adapter	PA-A3-8E1IMA
8-port ATM Inverse multiplexer T1 port adapter	PA-A3-8T1IMA
1-port ATM enhanced OC3c/STM1 multimode port adapter	PA-A3-OC3MM
1-port ATM enhanced OC3c/STM1 multimode port adapter	PA-A3-OC3MM=
1-port ATM enhanced OC3c/STM1 single-mode (IR) port adapter	PA-A3-OC3SMI
1-port ATM enhanced OC3c/STM1 single-mode (IR) port adapter	PA-A3-OC3SMI=
1-port ATM enhanced OC3c/STM1 single-mode (LR) port adapter	PA-A3-OC3SML
1-port ATM enhanced OC3c/STM1 single-mode (LR) port adapter	PA-A3-OC3SML=
4-port E1 G.703 serial port adapter (75-ohm/unbalanced)	PA-4E1G/75
4-port E1 G.703 serial port adapter (75-ohm/unbalanced)	PA-4E1G/75=
4-port E1 G.703 serial port adapter (120-ohm/balanced)	PA-4E1G/120
4-port E1 G.703 serial port adapter (120-ohm/balanced)	PA-4E1G/120=
1-port E3 serial port adapter with E3 DSU	PA-E3

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
1-port E3 serial port adapter with E3 DSU	PA-E3=
2-port E3 serial port adapter with E3 DSUs	PA-2E3
2-port E3 serial port adapter with E3 DSUs	PA-2E3=
1-port T3 serial port adapter with T3 DSUs	PA-T3
1-port T3 serial port adapter with T3 DSUs	PA-T3=
1-port T3 serial port adapter enhanced	PA-T3+
1-port T3 serial port adapter enhanced	PA-T3+=
2-port T3 serial port adapter with T3 DSUs	PA-2T3
2-port T3 serial port adapter with T3 DSUs	PA-2T3=
2-port T3 serial port adapter enhanced	PA-2T3+
2-port T3 serial port adapter enhanced, spare	PA-2T3+=
1-port multichannel E3 port adapter	PA-MC-E3
1-port multichannel E3 port adapter	PA-MC-E3=
1-port multichannel T3 port adapter	PA-MC-T3
1-port multichannel T3 port adapter	PA-MC-T3=
2-port multichannel E1 port adapter with G.703 120-ohm interface	PA-MC-2E1/120
2-port multichannel E1 port adapter with G.703 120-ohm interface	PA-MC-2E1/120=
2-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-2T1
2-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-2T1=
2-port multichannel T3 port adapter	PA-MC-2T3+
2-port multichannel T3 port adapter	PA-MC-2T3+=
4-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-4T1
4-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-4T1=
8-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-8T1
8-port multichannel T1 port adapter with integrated CSU/DSUs	PA-MC-8T1=
8-port multichannel E1 port adapter with G.703 120-ohm interface	PA-MC-8E1/120
8-port multichannel E1 port adapter with G.703 120-ohm interface	PA-MC-8E1/120=
8-port BRI port adapter, S/T interface	PA-8B-S/T
8-port BRI port adapter, S/T interface	PA-8B-S/T=
4-port BRI port adapter, U interface	PA-4B-U
4-port BRI port adapter, U interface	PA-4B-U=

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
1-port packet/SONET OC3c/STM1 multimode port adapter	PA-POS-OC3MM
1-port packet/SONET OC3c/STM1 multimode port adapter	PA-POS-OC3MM=
1-port packet/SONET OC3c/STM1 single-mode (IR) port adapter	PA-POS-OC3SMI
1-port packet/SONET ONC3c/STMI1 single-mode (IR) port adapter	PA-POS-OC3SMI=
1-port packet/SONET OC3c/STM1 single-mode (LR) port adapter	PA-POS-OC3SML
1-port packet/SONET OC3c/stm1 single-mode (LR) port adapter	PA-POS-OC3SML=
2-port T1/E1 moderate capacity enhanced voice port adapter	PA-VXB-2TE1+
2-port T1/E1 moderate capacity enhanced voice port adapter	PA-VXB-2TE1+=
2-port TE1 high-capacity enhanced voice port adapter	PA-VXC-2TE1+
2-port TE1 high-capacity enhanced voice port adapter	PA-VXC-2TE1+=
5-port Ethernet 10BaseFL port adapter	PA-5EFL
5-port Ethernet 10BaseFL port adapter	PA-5EFL=
Cisco 7400 Cables	
Adapter cable--converts 75 ohm to 120 ohm	CAB-ADPT-75-120
Adapter cable--converts 75 ohm to 120 ohm, spare	CAB-ADPT-75-120=
4-pack 75-120-ohm adapter cables	CAB-ADPT4P-75-120
ATM cable, DS3+e3; 10 ft	CAB-ATM-DS3/E3=
V.35 cable, DTE, male, 10 ft	CAB-V35MT
V.35 cable, DTE, male, 10 ft	CAB-V35MT=
V.35 cable, DCE, female, 10 ft	CAB-V35FC
V.35 cable, DCE, female, 10 ft	CAB-V35FC=
RS-232 cable, DTE, male, 10 ft	CAB-232MT
RS-232 cable, DTE, male, 10 ft	CAB-232MT=
RS-232 cable, DCE, female, 10 ft	CAB-232FC
RS-232 cable, DCE, female, 10 ft	CAB-232FC=
RS-449 cable, DTE, male, 10 ft	CAB-449MT
RS-449 cable, DTE, male, 10 ft	CAB-449MT=
RS-449 cable, DCE, female, 10 ft	CAB-449FC
RS-449 cable, DCE, female, 10 ft	CAB-449FC=
X.21 cable, DTE, male, 10 ft	CAB-X21MT
X.21 cable, DTE, male, 10 ft	CAB-X21MT=

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
X.21 cable, DCE, female, 10 ft	CAB-X21FC
X.21 cable, DCE, female, 10 ft	CAB-X21FC=
RS-530 cable, DTE, male, 10 ft	CAB-530MT
Male DTE RS-530 cable, 10 ft	CAB-530MT=
8-lead octal cable and 8 male V35 DTE connectors	CAB-OCT-V35-MT
8-lead octal cable and 8 male V35 DTE connectors	CAB-OCT-V35-MT=
8-lead octal cable and 8 female V35 DCE connectors	CAB-OCT-V35-FC
8-lead octal cable and 8 female V35 DCE connectors	CAB-OCT-V35-FC=
8-lead octal cable and 8 male RS232/V.24 DTE connectors	CAB-OCT-232-MT
8-lead octal cable and 8 male RS232/V.24 DTE connectors	CAB-OCT-232-MT=
8-lead octal cable and 8 female RS232/V.24 DCE connectors	CAB-OCT-232-FC
8-lead octal cable and 8 female RS232/V.24 DCE connectors	CAB-OCT-232-FC=
8-lead octal cable and 8 male X21 DTE connectors	CAB-OCT-X21-MT
8-lead octal cable and 8 male X21 DTE connectors	CAB-OCT-X21-MT=
8-lead octal cable and 8 female X21 DCE connectors	CAB-OCT-X21-FC
8-lead octal cable and 8 female X21 DCE connectors	CAB-OCT-X21-FC=
Cisco 7400 HSSI Interface Cables	
HSSI cable, male-to-male connectors	CAB-HSI1
HSSI cable, male-to-male connectors, 10 ft	CAB-HSI1=
Cabasy, null modem, DTE, HSSI	CAB-HNUL
HSSI cable, male-to-male null modem cable, 10 ft	CAB-HNUL=
Cisco 7400 Power Supplies and Cords	
AC power cord, US	CAB-AC=
AC power cord, Australia	CAB-ACA=
AC power cord, Europe	CAB-ACE=
AC power cord, Italy	CAB-ACI=
Power cord, Argentina, spare	CAB-ACR=
AC power cord, UK	CAB-ACU=
Cisco 7400 Spares and Accessories	
Cisco 7400 Rackmount Kit and Cable Management Bracket	ACS-7400-RMK=
Cisco 7400 Blank Card Carrier	MAS-74KBLANK=

Table 6 Part Numbers for the Cisco 7400

Part Description	Part Number
Cisco 7400 Port Adapter Divider (Spare)	MAS-74KSLOTDIV=
Cisco 7400 Spare System Packaging Material	PKG-7400=
Cisco 7400 Feature Licenses	
Cisco IOS 7400 Broadband User Services License	FR-BUS74
Cisco IOS 7400 Broadband User Services License	FR-BUS74=
Cisco IOS 7400 WAN Packet Protocols/NetFlow License	FR-WPP74
Cisco IOS 7400 WAN Packet Protocols/NetFlow License	FR-WPP74=
Cisco IOS 7400 Interdomain Routing/Tag Switching License	FR-IR74
Cisco IOS 7400 Interdomain Routing/Tag Switching License	FR-IR74=
Cisco IOS 7400 40-bit encryption	FR74-40=
Cisco IOS 7400 56-bit encryption	FR74-56=
Cisco IOS 7400 Layer 3 Switching to IP	FR74-R-I=
Cisco IOS 7400 Layer 3 Switching to Enterprise	FR74-R-A=
Cisco IOS 7400 IP to Enterprise	FR74-C-A=
Cisco IOS 7400 Firewall Upgrade	FL74-H=

Documentation

For part numbers for product specific documentation, visit

http://www.cisco.com/univercd/cc/td/doc/pcat/swdo__d1.htm

1. CE = European Compliance
2. UL = Underwriters Laboratory
3. CSA = Canadian Standards Association
4. EN = European Norm
5. IEC = International Electrotechnical Commission
6. TS = Technical Specification
7. AS/NZS = Standards Australia/Standards New Zealand
8. CFR = Code of Federal Regulations
9. FCC = Federal Communications Commission
10. ICES = Interference-Causing Equipment Standard
11. VCCI = Voluntary Control Council for Information Technology Equipment (Japan)

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: +65 317 7777
Fax: +65 317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the

Cisco Web site at www.cisco.com/go/offices

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland
Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland
Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

LW3379 0802