

Cisco 7200 Series Routers

Quick Look Guide



The Cisco 7200 Series Router delivers exceptional performance / price with its compact form factor, modularity, scalability, and wide range of deployment options. With processing speeds up to 400,000 packets per second (pps), port adapters ranging from NxDS0 to OC12, and an unparalleled number of high-touch IP services, the Cisco 7200 is an excellent choice for the WAN edge, with features that support the following deployments:

- WAN Edge—Award-winning quality-of-service (QoS) feature performance
- Broadband Aggregation—Up to 8000 PPP sessions per chassis
- Multiprotocol Label Switching (MPLS) PE—Leading choice for provider-edge deployment
- Voice, video and data integration—Time-division multiplexing (TDM)-enabled VXR chassis and voice port adapters
- IP Security (IPsec) virtual private network (VPN)—Scalable to 3000 tunnels per chassis
- High-end Customer Premise Equipment (CPE)

Cisco 7200 Features and Benefits

Features	Benefits
Compact Form Factor	With a 3-RU chassis, the Cisco 7200 is an ideal solution for a stackable, scalable midrange routing solution.
Performance / Price Leadership	With processing capacity of up to 400 Kpps, the Cisco 7200 is the most powerful single-processor platform from Cisco Systems.
IP Services Leadership	The Cisco 7200 is the leading platform for new feature development and currently has an unparalleled number of high-touch IP services.
Services Acceleration	The Cisco 7200 NSE-1 Processor with Parallel Express Forwarding (PXF) delivers hardware-accelerated IP services for a variety of solution areas-including WAN Edge, QoS and broadband subscriber aggregation (Q3 2001).
Voice-enabled	The Cisco 7200 provides full multi-service gateway functionality for voice over IP, Frame Relay or ATM.
Unparalleled Connectivity Options	The Cisco 7200 provides high port density and extensive LAN and WAN connectivity options, dramatically reducing the cost per port and allowing flexible deployment options.
Investment Protection—Scalability, common port adapters, and a wide range of deployment options	The Cisco 7200 port adapters, combined with the Cisco 7400, 7500, and 7600 product lines, simplify stocking of spares and protecting customer investment in interfaces.
Full Cisco IOS support	The Cisco 7200 supports network services, including quality of service, security, compression, and encryption at high speeds.

Flexibility, Modularity and Performance in a Compact Form Factor

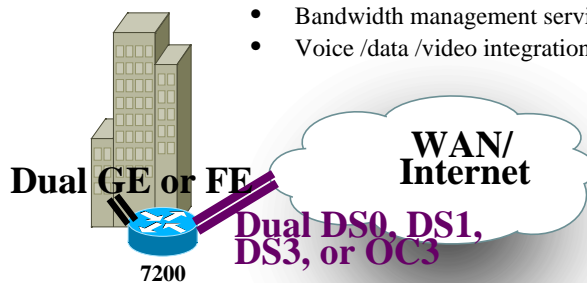


Cisco 7200 Target Applications

Application	Benefit
WAN Edge	With an unparalleled number of high-touch IP services and hardware accelerated WAN Edge and QoS services, the Cisco 7200 is an ideal WAN Edge connectivity or aggregation solution.
Broadband Subscriber Aggregation	The Cisco 7200 supports up to 8000 PPP, RBE or L2TP sessions. This enables aggregation of a large number of users into a compact form factor saving rack space and reducing hardware investment dollars.
MPLS PE Functionality	The Cisco 7200 is an ideal MPLS PE solution. MPLS fuses the intelligence of routing with the performance of switching to scale existing networks to meet future growth demands. Networks can handle more traffic, users, media-rich data or bandwidth-intensive applications.
Voice and Data Integration	The Cisco 7200 provides the highest density Cisco voice gateway solution with 20 T1/18 E1 trunk terminations in 3RU. The Cisco 7200, with its advanced QoS features, can also integrate voice and data within the same chassis enabling customers to transport voice over data networks, save on capital equipment costs associated with two networks, TDM and packet-based, including the recurring management costs of each.
IPSec VPN	Using the Industry-Standard Architecture (ISA) service adapter, the Cisco 7200 can aggregate up to 2000 56-bit or 3 DES encrypted sessions per chassis. Dual-ISA configurations provide up to 3000 sessions.

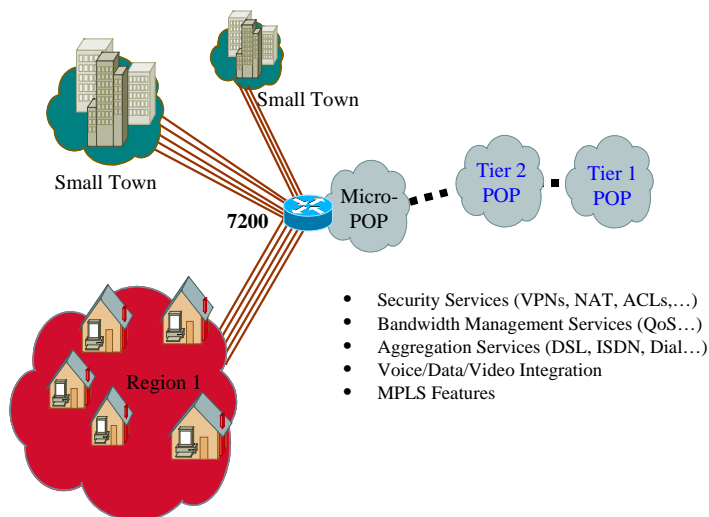
Cisco 7200 High-End Customer Premises Equipment (CPE)—Enterprise Edge

- Security services (VPNs, NAT, ACLs, etc)
- Bandwidth management services (QoS...)
- Voice /data /video integration

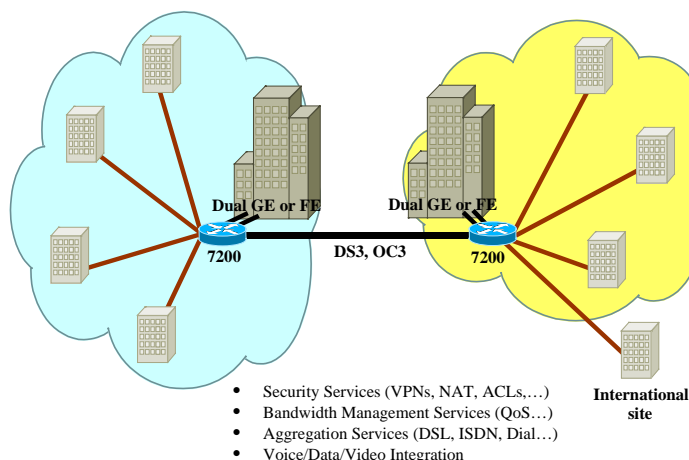




Cisco 7200 Service Provider Aggregation



Cisco 7200 Enterprise WAN Aggregation



Cisco 7200: Processor, Port Adapter and Memory Support

	Description	Part Number
Network Processing Engines	225Kpps 400Kpps 300Kpps, services accelerated	NPE-225 NPE-400 NSE-1
I/O Cards	2-port Fast Ethernet/Ethernet (auto-sensing) 1-port GE + 1-port Ethernet 1-port Fast Ethernet	C7200-I/O-2FE/E C7200-I/O-GE+E C7200-I/O-FE
Flash PCMCIA Memory	48 MB (default) 110 MB (max)	MEM-I/O-FLD48M MEM-I/O-FLD128M
DRAM Memory	128 MB (default) 256 MB (max) 512 MB (npe-400 only)	MEM-NPE-128MB, MEM-NPE-400-128MB MEM-NPE-400-256MB, MEM-SD-NSE-256MB MEM-NPE-400-512MB
ATM Port Adapters	1-port OC3/STM1 Enhanced multi- and single- mode 1-port DS3 Enhanced 1-port E3 Enhanced 8-port T1 IMA Enhanced 8-port E1 IMA Enhanced ATM Circuit Emulation Services	PA-A3-OC3MM, PA-A3-OC3SM PA-A3-T3 PA-A3-E3 PA-A3-8T1IMA PA-A3-8E1IMA PA-A2-4T1, PA-A2-4E1
SONET Port Adapters	1 port OC3/STM1 POS single- and multi-mode	PA-POS-OC3-SM, PA-POS-OC3-MM

Dynamic Packet Transport (DPT)	1-port OC12 single- and multi-mode	PA-SRP-OC12SM, PA-SRP-OC12MM
Voice-Enabled Port Adapters	2 port T1/E1 High Capacity Digital Voice 2 port T1/E1 Medium Capacity Digital Voice 2-port T1/E1 MIX-enabled T1/E1 4-port T1/E1 MIX-enabled T1/E1 8-port T1/E1 MIX-enabled T1/E1	PA-VXC-2TE1+ PA-VXB-2TE1+ PA-MCX-2TE1 PA-MCX-4TE1 PA-MCX-8TE1
Multichannel and ISDN Port Adapters	2-port Enhanced Multichannel T3 1-port Multichannel T3 1-port Multichannel E3 1-port Multichannel STM-1 2-port Multichannel T1 (CSU/DSU & PRI) 4-port Multichannel T1 (CSU/DSU & PRI) 2-port Multichannel E1 (G.703/G.704&PRI) 8-port Multichannel E1 (G.703/G.704&PRI) 8 port ISDN BRI (S/T) 4-port ISDN BRI (U)	PA-MC-2T3+ PA-MC-T3 PA-MC-E3 PA-MC-STM-1 PA-MC-2T1 PA-MC-4T1 PA-MC-2E1/120 PA-MC-8E1/120 PA-8B-S/T PA-4B-U
High Speed Serial Port Adapters	1-port HSSI 2-port HSSI 1-port High Speed Enhanced T3 Serial (with DSU) 2-port High Speed Enhanced T3 Serial (with DSU) 1-port High Speed E3 Serial (with DSU) 2-port High Speed E3 Serial (with DSU)	PA-H PA-2H PA-T3+ PA-2T3+ PA-E3 PA-2E3
Serial Port Adapters	4-port Serial, enhanced 8-port Serial, V.35, RS-232, or X.21 4-port Serial E1 (G.703)	PA-4T+ PA-8T-V35, PA-8T-232, PA-8T-X21 PA-4E1G/75, PA-4E1G/120
Mainframe Channel Connection Port Adapters	1-port ESCON Mainframe Channel Port Adapter 1-port Parallel Mainframe Channel Port Adapter	PA-1C-E PA-1C-P
LAN Port Adapters	4-port 10BaseT 8-port 10BaseT 5-port 10BaseFL 1-port 100BaseTX, FX 2-port 100BaseTX, FX 1-port Gigabit Ethernet 4-port Token Ring 4/16Mbps, Half/Full Duplex 12-port Ethernet/2-port Fast Ethernet Etherswitch	PA-4E PA-8E PA-5EFL PA-FE-TX, PA-FE-FX PA-2FE-TX, PA-2FE-FX PA-GE PA-4R-DTR Pa-12E/2FE
Service Adapter Modules	Encryption (SA-ISA)	SA-ISA

Copyright © 2001 Cisco Systems, Inc. All rights reserved. Cisco, Cisco IOS, Cisco Systems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. or its affiliates in the U.S. and certain other countries. All other brands, names, or trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0102R)



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 Europe
11, Rue Camille Desmoulins
92782 Issy Les Moulineaux
Cedex 9
France
www.cisco.com
Tel: 33 1 58 04 60 00
Fax: 33 1 58 04 61 00

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 Australia, Pty., Ltd
Level 17, 99 Walker Street
North Sydney
NSW 2059 Australia
www.cisco.com
Tel: +61 2 8448 7100
Fax: +61 2 9957 4350

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

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

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE
Finland • France • Germany • Greece • Hong Kong • 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

Copyright © 2001, Cisco Systems, Inc. All rights reserved. Printed in the USA. Access Registrar, AccessPath, Are You Ready, ATM Director, Browse with Me, CCDA, CCDE, CCDP, CCIE, CCNA, CCNP, CCSI, CD-PAC, CiscoLink, the Cisco NetWorks logo, the Cisco Powered Network logo, Cisco Systems Networking Academy, Fast Step, FireRunner, Follow Me Browsing, FormShare, GigaStack, IGX, Intelligence in the Optical Core, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, iQuick Study, iQ Readiness Scorecard, The iQ Logo, Kernel Proxy, MGX, Natural Network Viewer, Network Registrar, the Networkers logo, Packet, PIX, Point and Click Internetworking, Policy Builder, RateMUX, ReyMaster, ReyView, ScriptShare, Secure Script, Shop with Me, SlideCast, SMARTnet, SVX, TrafficDirector, TransPath, VlanDirector, Voice LAN, Wavelength Router, Workgroup Director, and Workgroup Stack are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, Empowering the Internet Generation, are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, Cisco, the Cisco Certified Internetwork Expert Logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Collision Free, Enterprise/Solver, EtherChannel, EtherSwitch, FastHub, FastLink, FastPAD, IOS, IP/TV, IPX, LightStream, LightSwitch, MICA, NetRanger, Post-Routing, Pre-Routing, Registrar, StrataView Plus, Stratim, SwitchProbe, TeleRouter, and VCO are registered trademarks of Cisco Systems, Inc. or its affiliates in the U.S. and certain other countries. All other brands, names, or trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0010R)