

Cisco 805 Series Serial Router

The Cisco 805 Serial Router offers enhanced network security and reliability through the power of Cisco IOS[®] Software technology tailored for small offices.

The Cisco 805 Serial Router extends the power of Cisco IOS Software technology to small offices. Cisco IOS Software offers enhanced security, reliability, and safe investment, combined with low cost of ownership, to enable customers to benefit from increased productivity, simplified communication, and reduced costs (Figure 1). The Cisco 805 Serial Router enables customers to benefit from value-added services such as managed network services, virtual private networks (VPNs), point-of-sale (POS) applications, and secure Internet access.

Benefits of Using Cisco 805 Serial Router

Taking advantage of its expertise and leadership in Internet solutions, Cisco Systems offers solutions for small-office routing solutions that provide secure and reliable access to the Internet or corporate networks.

Figure 1
The Cisco 805 Serial Router gives small offices enhanced security, superior reliability, and safe investment with low cost of ownership.



Enhanced Security

The Cisco 805 Serial Router has enhanced security features such as an integrated stateful firewall and IP Security (IPSec) encryption to enable VPNs. These features allow small offices and telecommuters to conduct business over the Internet while protecting valuable resources.

Superior Reliability

Because the Cisco 805 Serial Router is based on the same proven Cisco IOS Software technology used throughout the Internet, small offices can depend on it just as enterprise customers take advantage of Cisco reliability. In addition, a Cisco 805 Serial Router provides Internet access to multiple users without being tied to a server or dedicated PC. This means if a server on the LAN crashes, other users remain connected to the Internet.

Safe Investment and Low Cost of Ownership

The Cisco 805 Serial Router offers memory options that can be upgraded in the field so the latest networking features can be added when necessary. With an advanced processor and memory architecture, they can support future applications as customer networking needs expand. Table 1 provides a summary of Cisco 805 Serial Router hardware features.



With Cisco IOS Software, customers using the Cisco 805 Serial Router can reduce operational costs for training, management, installation, and deployment.

Table 1 Summary of Cisco 805 Serial Router Hardware Features

Feature	Details
LAN	One 10BASE-T (RJ-45)
WAN	Serial port compatible with EIA/TIA-232, EIA/TIA-449, EIA/TIA-530, EIA/TIA-530A, X.21, and V.35 standards (Both data terminal equipment [DTE] and data communications equipment [DCE])
Console port	RJ-45
LAN port	One Ethernet

Product Features

Security

To take advantage of the unprecedented opportunities offered by communications and commerce over the Internet, companies need to secure private information. Cisco Secure Integrated Software provides many technologies to build a custom security solution. The elements of security services include perimeter security, identity, monitoring, privacy, firewalls, IPSec encryption, and VPNs.

Standard Security

Perimeter security refers to the control of traffic entry and exit between network boundaries, such as between private networks, intranets, extranets, or the Internet. Cisco IOS Software perimeter security technologies provide a highly flexible, superior solution with features such as:

- Standard and extended access control lists (ACLs)
- Lock and key (dynamic ACLs)
- Router and route authentication, authorization, and accounting (AAA) protocols such as Password Authentication Protocol (PAP) or Challenge Handshake Authentication Protocol (CHAP), and MS-CHAP
- Network Address Translation (NAT) (including multi-NAT)
- Token card authentication with Cisco Secure authentication

NAT eliminates the need to re-address all hosts with existing private network addresses and hides internal addresses from public view. For businesses that want to allow selected access to the network, NAT can be configured to allow only certain types of data requests such as Web browsing, e-mail, or file transfers.

Enhanced Security

- *Dynamic firewall*—Companies increasingly rely on internal networks and servers to access company data. To use the Internet as a key business tool, companies must connect their internal networks to the Internet, while keeping sensitive internal data secure. Company data can be protected against unauthorized access with stateful firewalls. The integrated Cisco IOS Firewall Feature Set is a stateful firewall that provides:
 - Stateful (dynamic) ACLs (application or context based)
 - Java blocking



- Denial-of-service attack detection and prevention
- Real-time alerts and audit trails

Dynamic firewalls provide these vital enhanced security features. The term firewall is used by many vendors, but not uniformly referred to as stateful firewalls. Firewalls that are not dynamic do not provide these enhanced security features.

Encryption and Tunneling

The Cisco 805 Serial Router provides IPSec encryption technology to enable small offices and telecommuters to deploy VPNs. IPSec encryption provides privacy, integrity, and authenticity for transmission of sensitive information over the Internet. The unique end-to-end Cisco offering allows customers to implement IPSec encryption transparently into the network without affecting individual PCs. The Cisco 805 Serial Router with IPSec encryption allows significant cost savings by using the Internet to create secure connections between small offices and teleworkers. As a component of the Cisco VPN solution, the Cisco 805 Serial Router supports:

- IPSec tunneling with 128- or 56-bit Data Encryption Standard (DES or Triple DES [3DES])
- Layer 2 Tunneling Protocol (L2TP)
- Generic routing encapsulation (GRE)

Manageability

The Cisco 805 Serial Router supports management by a wide range of platforms and applications. Cisco ConfigMaker (Microsoft) and CiscoView (UNIX) applications provide superior capabilities for configuration and security management, as well as performance and fault monitoring. The Cisco 805 Serial Router supports centralized administration and management using Simple Network Management Protocol (SNMP), Telnet, or local management through the router console port.

Safe Investment

Small offices with limited time, money, and staff need to know their technology investments are safe.

Field-expandable DRAM and Flash memory allow small offices to take advantage of new Cisco IOS Software feature enhancements. And because the Cisco 805 Serial Router incorporates an advanced processor and memory architecture, it can support future applications as customer networking needs expand.

Companies using the Cisco 805 Serial Router can take advantage of Cisco industry-leading support options that help to ensure the router stays up and running. These support services include:

- Cisco IOS Software updates in features such as protocol, security, and bandwidth
- Full access to Cisco.com for technical assistance and product information
- Twenty-four-hour access to the industry's largest dedicated technical support staff, with the first 90 days included at no charge



Installation and Configuration Tools

The Cisco 805 Serial Router also supports configuration with the Cisco ConfigMaker application. Cisco ConfigMaker is a software tool designed to configure a small network of Cisco routers, switches, hubs, and other network devices from a single PC using Windows 95, 98, 2000, or NT 4.0. It is designed for resellers and network administrators of small and medium-sized businesses that are proficient in LAN and WAN fundamentals and basic network design.

For additional setup ease, the Cisco 805 Serial Router has color-coded ports and cables to help users make proper connections (Figure 2). Quick Reference Guide documentation provides easy-to-follow installation instructions. Key features and benefits of the Cisco 805 Serial Router are defined in Table 2, and Table 3 lists Cisco 805 Serial Router hardware specifications.

Figure 2

Cisco Fast Step[®] Software makes it easy for nontechnical users to install a Cisco 805 Serial Router.





Table 2 Cisco 805 Serial Router Key Features and Benefits

Feature	Benefit
Standard Security	
PAP, CHAP, MS-CHAP, and ACLs	<ul style="list-style-type: none">• Protects network from unauthorized access
Route and router authentication	<ul style="list-style-type: none">• Accepts routing table updates from only known routers, ensuring no corrupt information from unknown sources is received
Enhanced Security	
Cisco IOS Firewall feature set	<ul style="list-style-type: none">• Offers internal users secure, per-application dynamic ACLs for all traffic across perimeters• Defends and protects router resources against denial-of-service attacks• Checks packet headers and drops suspicious packets• Protects against unidentified, malicious Java applets• Details transactions for reporting on a per-application, per-feature basis
IPSec encryption (DES and 3DES)	<ul style="list-style-type: none">• Ensures data integrity and authenticity of origin by using standards-based encryption• Provides security for all users on the LAN without configuring individual PCs
Superior Reliability	
Cisco IOS Software technology	<ul style="list-style-type: none">• Proven technology that is used throughout the backbone of the Internet
Standalone router	<ul style="list-style-type: none">• Provides Internet access to multiple users without being tied to a server or dedicated PC; if one user on the LAN crashes, other users can still access the Internet
Management	
Cisco Configmaker, Fast Step Software 2.3, SNMP, Service Assurance (SA) Agent, TACAS+	<ul style="list-style-type: none">• Graphical user interface (GUI)-based windows configuration tools for novice users• Remote management and monitoring by way of SNMP or Telnet and local management through console port
Safe Investment	
Field-expandable memory	<ul style="list-style-type: none">• Allows customers to add features as networking needs expand
Advanced processor and memory architecture	<ul style="list-style-type: none">• Ensures the platform can support processor-intensive applications
World-class support	<ul style="list-style-type: none">• Helps customers keep their Cisco 805 serial routers running all the time
Low Cost of Ownership	
Lower operational costs	<ul style="list-style-type: none">• Allows customers to use existing knowledge of Cisco IOS Software for installation and manageability
Bandwidth Optimization	
Quality of service (QoS) and Weighted Fair Queuing	<ul style="list-style-type: none">• Ensures consistent response times for multiple applications by allocating bandwidth intelligently• Gives the most important applications priority use of the WAN line



Table 2 Cisco 805 Serial Router Key Features and Benefits

Feature	Benefit
Choice of encapsulation (Point-to-Point Protocol [PPP], High-Level Data Link Control [HDLC], Frame Relay)	<ul style="list-style-type: none"> Ensures compatibility with existing network
“Snapshot” routing for IP and Internetwork Packet Exchange (IPX)	<ul style="list-style-type: none"> Allows efficient use of available bandwidth
X.25 packet data	<ul style="list-style-type: none"> Permits data transfer over X.25 networks
Simplified Setup and Installation	
NAT	<ul style="list-style-type: none"> Lets businesses conserve valuable IP addresses Reduces time and costs by reducing IP address management
Cisco Fast Step Software 2.3	<ul style="list-style-type: none"> Simplifies installation with easy, step-by-step procedures
Cisco IOS Software Easy IP	<ul style="list-style-type: none"> Enables true mobility-client IP addresses are transparently configured via the Cisco IOS Dynamic Host Control Protocol (DHCP) server each time a client powers up
Color-coded ports and cables and Quick Start Reference Guide	<ul style="list-style-type: none"> Helps users make proper connections Provides easy-to-follow installation instructions

Table 3 Cisco 805 Serial Router Hardware Specification

Feature	Description
10BASE-T Ethernet port	Provides connection to a 10BASE-T (10 Mbps) Ethernet network, compatible with a 10/100-Mbps device
Serial port	Provides connection to EIA/TIA-232, EIA/TIA-449, EIA/TIA-530, EIA/TIA-530A, X.21, and V.35 DTE or DCE
RJ-45 console port	Provides connection to terminal or PC for software configuration and for router troubleshooting
Flash memory	Router provides 4 MB of Flash memory ¹
DRAM	Router provides 8 MB of DRAM ¹
Ease of installation	Color-coded ports and cables reduce the chance of error
Cisco IOS Software	Router supports a subset of Cisco IOS Software
Cisco 805 Fast Step Software	Provides a Windows 95, Windows 98, and Windows NT software tool for basic Cisco 805 Serial Router configuration
Cable lock	Provides a way to physically secure router
Locking power connector	Locks power connector in place
Wall-mount feature	Brackets on router bottom provide a way to mount router on wall or vertical surface

1. An additional 4 or 8 MB of Flash memory and DRAM can be added at the factory or later. You can order upgrade kits and have qualified personnel add the memory. The Cisco product number for the 4-MB Flash memory upgrade kit is MEM805-4U8F, for the 8-MB Flash memory upgrade kit it is MEM805-4U12F, for the 4-MB DRAM upgrade kit it is MEM805-8U12D, and for the 8-MB DRAM upgrade kit it is MEM805-8U16D. (Because of the height of the actual DRAM component, you must order the additional DRAM from Cisco.)



Cisco IOS Software Feature Sets

Five Cisco IOS Software feature sets are available on the Cisco 805 Serial Router:

- IP
- IP/Plus
- IP/FW
- IP/VPN
- IP/VPN/IPX/Plus

For detailed feature support and memory requirements by model, by Cisco IOS Software image, or by Cisco IOS Software version, consult the Cisco Feature Navigator at the following URL or consult your Cisco authorized representative:

<http://www.cisco.com/warp/public/732/support/fn/index.shtml>.

Technical Specification

Description	Design Specification
Physical Dimensions	
Dimensions (H x W x D)	2.0 x 9.7 x 8.3 in. (5.1 x 24.6 x 21.1 cm)
Weight (does not include desktop power supply)	1.5 lb (0.66 kg)
Environmental Operating Ranges	
Nonoperating temperature	-4 to 149 F (-20 to 65 C)
Nonoperating humidity	5 to 95%, relative humidity
Nonoperating altitude	0 to 15,000 ft (4570 m)
Operating temperature	32 to 104 F (0 to 40 C)
Operating humidity	10 to 85%, relative humidity
Operating altitude	0 to 10,000 ft (3000m)
Power	
AC input voltage	100 to 240 VAC
Frequency	50 to 60 Hz
Power consumption	20W

Regulatory Approvals

Safety Standards	EMI Standards	PTT Standards
UL 1950	CFR 47, part 15, class B	CTR2
CSA 22.2 No. 950	ICES, Issue 2, class B	TC 130
TUV-GS to EN 60950:1992 with Amendments A1 through A4	VCCI class 2	(CE168_X_)
IEC 60950 with Amendments A1 through A4 and all country deviations	AZ/NRZ 3548 class B	JATE
TS-001:1997	EN 55022, IEC 1000-3-3	
IEC 1000-4-2 level 4		
AS/NZS 3260 with Amendments A1 through A4	IEC 1000-4-3 level 3	
IEC 1000-4-4 level 3		
EN 300 047	IEC 1000-4-5 level 3	
EN 41003		
IEEE 802.3		

Contact Information

For more information on the Cisco 805 Serial Router contact:

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- Europe: 32 2 778 4242
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Or contact your local Cisco office. To locate one nearest you, visit: <http://www.cisco.com/offices>

Availability

The Cisco 805 Serial Router is orderable and available today.



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