

CISCO
The bridge to possible

Cisco 1100 Terminal Services Gateway

Contents

Product overview	3
Hardware features	3
Features and benefits	4
Platform architecture	5
Product specifications	6
Interfaces and modules supported	11
Redundant power supply architecture	11
Network Equipment Building System (NEBS) support	11
Smart Software Licensing support	11
Cisco IOS Software licensing and packaging	12
Ordering information	12
Warranty information	13
Cisco and partner services for console services	13
Cisco environmental sustainability	14
Cisco Capital	14
For more information	14

The Cisco[®] 1100 Terminal Services Gateway provides up to 72 asynchronous ports on a single-rack-unit form factor, supporting up to 24 Layer 2 switch ports, LTE Advanced 3.0, and high availability using dual power supplies.

Product overview

The compact, high-density Cisco 1100 Terminal Services Gateway (C1100 TSG) with Cisco IOS® XE Software allows secure remote management of a wide variety of networking, compute, Internet of Things (IoT), and other devices. It integrates Layer 2 switching and comprehensive security with the ability to integrate wired and wireless WAN connections (LTE Advanced 3.0) into a single rack unit. The C1100 TSG allows secure authentication (through support for RADIUS or TACACS) of remote users connecting to resources on an internal corporate or private network from Internet-connected devices.

Cloud service providers can deploy the C1100 TSG in data centers to provide secure connectivity to terminal servers, computers, IoT devices, and other networking equipment located in the internal network or behind a firewall. In addition, the gateway supports the Cisco IOS Firewall, IPsec and Network Address Translation (NAT), providing security and protection to all devices that connect to or from the terminal gateway. The C1100 TSG supports centralized and remote management capabilities through web-based tools and Cisco IOS® XE Software for full visibility into and control of network configurations at the remote site.

The Cisco 1100 TSG is available in three models: the C1100TG-1N24P32A (4GB and 8GB DRAM variants available) and C1100TG-1N32A (Figure 1). The base hardware comes with up to 32 RS-232-based asynchronous ports operable up to a maximum 230-Kbps connection per port, and the C1100TG-1N24P32A model supports a 24-port Layer 2 Gigabit Ethernet switch.

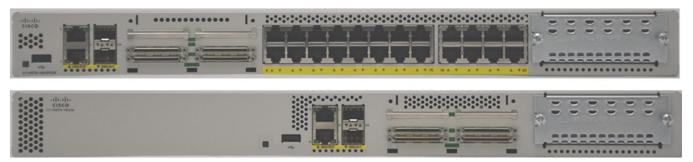


Figure 1. Cisco 1100 Terminal Services Gateway models

Hardware features

Three models of the Cisco 1100 Terminal Services Gateway are available: one with 32 asynchronous ports, a second model with 32 asynchronous ports plus a 24-port Gigabit Ethernet switch and a 8GB DRAM version of the second model providing LAN ports to connect multiple devices. All the models have a Network Interface Module (NIM) slot that supports selected NIMs. The supported NIMs are interchangeable between the Cisco 4000 Series Integrated Services Routers (ISRs) and the Cisco 1100 Terminal Services Gateway.

All the C1100 TSG models come with built-in AC or DC power supplies. The AC powered unit also provides support for High-Voltage DC (HVDC) (with a different input connector). The AC or DC power supply is selectable at the time of ordering but is not field replaceable.

In addition to the 32 onboard asynchronous ports, an optional 16-port asynchronous daughter card may be ordered that takes the onboard density to 48 ports. The NIM slot may additionally be populated with the NIM-16A or NIM-24A module, allowing a maximum of 72 terminal server ports. Customers may use Cisco asynchronous cable (CAB-ASYNC-8) to connect the 72 asynchronous ports to any combination of computing equipment, terminal servers, IoT devices, or networking equipment.

Every C1100 TSG provides two front panel Gigabit Ethernet WAN ports, allowing WAN connectivity to the gateway. Each of the WAN ports can support copper [RJ45] or Fiber Small Form-Factor Pluggable (SFP). The C1100 TSG is supported through the Cisco IOS® XE Software images, providing support for routing and security features (including firewall and IPsec).

Features and benefits

Table 1 highlights some of the features and benefits of the Cisco 1100 Terminal Services Gateway.

 Table 1.
 Cisco 1100 Terminal Services Gateway feature highlights

Business requirement	Feature/solution
Performance Throughput Service reliability	 Concurrent software services at speeds up to 500 Mbps. Backplane architecture supports high-bandwidth front panel-to-module communication. A distributed multicore architecture. Support for 100 Mbps IPsec performance.
Lower WAN expenditures	Embedded WAN solution for creating lower-cost, business-class Internet connections.
Superior and secure user application experiences	 Application Experience software bundle with advanced routing and network monitoring services. Dynamic Multipoint VPN (DMVPN), zone-based firewall, protecting data and providing authentication credentials and transmissions within or connecting to the data center. Secure Boot feature performs hardware-based authentication of the boot-loader software to prevent malicious or unintended software from booting on the system. Code signing verifies the digital signatures of executables prior to loading to prevent execution of altered or corrupted code. Hardware authentication protects against hardware counterfeiting by using onboard tamper-proof silicon, including field-replaceable modules. If authentication fails, the module is not allowed to boot.
IT consolidation, space savings, and improved Total Cost of Ownership (TCO)	 Single converged branch platform integrates routing, switching, security, and high-speed performance.
Business continuity and increased resiliency	 Support for integrated (internal) power supplies. A second externally connectable AC power connector is provided, enabling high availability. Modular interfaces support online removal and insertion (OIR)¹ for module upgrades without network disruption. Support for multiple, diverse access links: Gigabit Ethernet, asynchronous, and wireless WAN (through LTE Advanced 3.0).
Easier manageability and support	 Single, universal software image for all features and performance-on-demand licensing flexibility. No additional services and support needed for compute and storage. Supported by Cisco and third-party management tools, with programmability and automation.

¹ OIR follows the same rules as NIM modules on the 4000 Series ISRs. Please refer to the OIR guidelines for the 4000 Series.

Platform architecture

Table 2 lists the primary hardware architectural features and benefits of the Cisco 1100 Terminal Services Gateway. The gateway runs modular Cisco IOS° XE Software, widely deployed in the world's most demanding networks. The software's comprehensive portfolio of services spans multiple technology areas, including security, WAN optimization, application and network Quality of Service (QoS), and embedded management.

 Table 2.
 Architectural highlights

Architectural features	Benefits/description
Multicore processors	 High-performance multicore processors support high-speed WAN connections. The data plane uses an emulated flow processor (FP) that delivers application-specific integrated circuit (ASIC)-like performance that does not degrade as services are added.
Serial port data rates	 1200, 2400, 4800, 9600 (default), 19,200, 38,400, 57,600, 115,200, and 230,000 bps Parity: None, even, or odd parity Bit support: 8-bit characters. 1 start bit, 1 stop bit
Security support	 Hardware-based IPsec support, Internet Key Exchange (IKE) v1 and v2, Encapsulating Security Payload (ESP) Encryption: Advanced Encryption Standard (AES) (256/192/128), Triple Data Encryption Standard (3DES), DES Integrity (hash): Secure Hash Algorithm (SHA), SHA-256, SHA-384, SHA-512, Suite B, MD5 HMAC Transport Layer Security (TLS) v1.2, v1.1, and v1.0; Secure Sockets Layer (SSL) v3.0 and v2.0 Secure Shell (SSH) v1 and v2 Diffie Hellman (DH): 768-bit, 1024-bit, 1536-bit, 2048-bit, 3072-bit, and 4096-bit DH groups, 2048-bit DH group with a 256-bit subgroup, and 256-bit and 384-bit Elliptic Curve DH (ECDH). Cert (CA support): X.509 v3, RSA, DSA Authentication, Authorization, and Accounting (AAA): RADIUS, TACACS+ integration with Lightweight Directory Access Protocol (LDAP), Kerberos Simple Network Management Protocol (SNMP) v2, v3 Network perimeter security with integrated application inspection firewall Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)
Integrated Gigabit Ethernet ports	 Provides up to two built-in 10/100/1000 Ethernet ports for WAN or LAN. The 10/100/1000 Ethernet ports can support SFP-based connectivity in addition to RJ45 connections, enabling fiber or copper connectivity.
Optional High Availability power supply	 High availability for power is achieved by using an optional external AC power supply to reduce network downtime and protect the network from power failures. Both power supplies may be connected to the mains. Upon failure of the internal power supply, the external (AC only) power supply automatically takes over.
Serial protocol support	 Point-to-Point Protocol (PPP), Password Authentication Protocol (PAP), and Challenge Handshake Authentication Protocol (CHAP), Serial Line Internet Protocol (SLIP), X.25/ X.25 over TCP (XOT), Layer 2 Tunneling Protocol (L2TP) v3, L2TP Network Server (LNS)
Control and flow signals	 Control signals: Clear to Send (CTS), Request to Send (RTS), Data Terminal Ready (DTR), Data Carrier Detect (DCD) Flow control: XON/XOFF (software), CTS/RTS (hardware)

Architectural features	Benefits/description
Cisco network interface modules (NIMs) ²	 A single integrated NIM slot allows for flexible configurations. Refer to Table 4 for supported NIM modules. The NIM slot offers high-data-throughput capability to the route processor and to the asynchronous interfaces, switch ports. NIMs support OIR.¹
Flash memory support	 Fixed flash memory with support for 4-GB flash; 8-GB flash for the TGX model. USB Type A 3.0 port (rear side) provides capabilities for storage¹ USB Type A 2.0 port (front side) provide capabilities for USB dongle.
DRAM (DDR4)	 The default control-plane memory is 4 GB, DRAM and flash memory are provided as fixed configuration and are not field replaceable or upgradable.
Async cable bracket	One, included with the C1100 TSG for up to 48 ports (32 onboard + 16 on the daughter card)
LED support (on chassis)	6 Async Status, 1 System Status
Console/Aux and Ground	• 1 Console and 1 Aux port; 1 ground connection (all on the rear panel)
Fan support	 3 fans on the rear panel (for C1100TG-1N24P32A). Fans are not field replaceable. 2 fans on the rear panel (for C1100TG-1N32A). Fans are not field replaceable.

Product specifications

Table 3 lists the general product specifications for the Cisco 1100 Terminal Services Gateway.

Table 3.Specifications

Technical specifications	C1100TGX-1N24P32A	C1100TG-1N24P32A	C1100TG-1N32A
Aggregate throughput (Cisco Express Forwarding)	500 Mbps	500 Mbps	500 Mbps
Aggregate throughput (IPsec)	100 Mbps	100 Mbps	100 Mbps
Total onboard WAN or LAN 10/100/1000 ports	2 WAN (GE/SFP) + 24 LAN	2 WAN (GE/SFP) + 24 LAN	2 WAN (GE/SFP)
RJ45-based ports	2 WAN (GE/SFP) + 24 LAN	2 WAN (GE/SFP) + 24 LAN	2 WAN (GE/SFP)
SFP-based ports	2	2	2
NIM slots	1	1	1
Daughter card	1x 16-port	1x 16-port	1x 16-port
OIR (all I/O modules)	Yes for NIMs	Yes for NIMs	Yes for NIMs

² Unified Communications (UC) license and UC-based NIMs or service modules (SMs) are not supported.

Technical specifications	C1100TGX-1N24P32A	C1100TG-1N24P32A	C1100TG-1N32A
Default memory DRAM (combined control, services, data planes) - fixed memory; non-upgradable	8 GB DDR4	4 GB DDR4	2 GB DDR4
Default flash memory (fixed)	8 GB	4 GB	4 GB
External USB 3.0/2.0 slots (type A)	1 / 1	1 / 1	1 / 1
Power-supply options ³	Internal AC or DC support	Internal AC or DC support	Internal AC or DC support
High availability for power supply	External AC only	External AC only	External AC only
AC input voltage	100 to 240V AC autoranging	100 to 240V AC autoranging	100 to 240V AC autoranging
DC input voltage Input voltage Input current	48 to 60V 4.2A	48 to 60V 4.2A	48 to 60V 4.2A
HVDC power supply unit ⁴ Input voltage Input current	180 to 240V 0.9A	180 to 240V 0.9A	180 to 240V 0.9A
AC input frequency	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
AC input current, AC power supply (maximum)	1.6A	1.6A	1.6A
AC input surge current	1.2/50 us, 1kV L-N/2kV L- PE and N-PE	1.2/50 us, 1kV L-N/2kV L- PE and N-PE	1.2/50 us, 1kV L-N/2kV L-PE and N-PE
Typical power (no modules)	50W	48W	30W
Maximum power with AC power supply	110W (no PoE)	110W (no PoE)	80W (no PoE)
Maximum power with DC power supply	110W (no PoE)	110W (no PoE)	80W (no PoE)
Dimensions (H x W x D)	1.73 x 17.5 x 12 in. 44 x 444 x 305 mm	1.73 x 17.5 x 12 in. 44 x 444 x 305 mm	1.73 x 17.5 x 12 in. 44 x 444 x 305 mm

³ Power supply is chosen at the time of ordering and is not field replaceable.

⁴ The same power supply provides both AC and HVDC power. Choose appropriate power cords at the time of ordering.

Technical specifications	C1100TGX-1N24P32A	C1100TG-1N24P32A	C1100TG-1N32A
External power supply dimensions (H x W x D)	2.9 x 1.2 x 6.1 in.	2.9 x 1.2 x 6.1 in.	2.9 x 1.2 x 6.1 in.
	75 x 30 x 155 mm	75 x 30 x 155 mm	75 x 30 x 155 mm
Shipping box dimensions (L x W x D)	23.2 x 17.7 x 8.0 in.	23.2 x 17.7 x 8.0 in.	23.2 x 17.7 x 8.0 in.
	589 x 449 x 203 mm	589 x 449 x 203 mm	589 x 449 x 203 mm
Rack height	1 rack unit	1 rack unit	1 rack unit
Rack-mount 19 in. (48.3 cm) EIA	Included	Included	Included
Rack-mount 23 in. (58.4 cm) EIA	Optional (no NEBS)	Optional (no NEBS)	Optional (no NEBS)
Wall-mount	No	No	No
Weight with internal power supply (no modules), DC PSU	9.47 lb	9.47 lb	8.8 lb
	4.29 kg	4.29 kg	3.99 kg
Typical weight (fully loaded with modules), DC PSU	10.1 lb	10.1 lb	9.4 lb
	4.6 kg	4.6 kg	4.29 kg
Weight with Internal power supply (no modules), AC PSU	9.98 lb	9.98 lb	9.31 lb
	4.52 kg	4.52 kg	4.22 kg
Typical weight (fully loaded with modules), AC PSU	10.64 lb	10.64 lb	9.98 lb
	4.82 kg	4.82 kg	4.52 kg
Weight with Internal power supply (no modules), HVDC PSU	9.98 lb	9.98 lb	9.31 lb
	4.52 kg	4.52 kg	4.22 kg
Typical weight (fully loaded with modules), HVDC PSU	10.64 lb	10.64 lb	9.98 lb
	4.82 kg	4.82 kg	4.52 kg
Packaging weight	14.0 lb	14.0 lb	14.0 lb
	6.35 kg	6.35 kg	6.35 kg
Airflow	I/O side to fan side	I/O side to fan side	I/O side to fan side
Mean Time Between Failures (MTBF) (hours) at 25° C	718,947 hours	739,252 hours	739 252 hours
Temperature	32° to 104°F	32° to 104°F	32° to 104°F
	0° to 40°C	0° to 40°C	0° to 40°C
Altitude	0 to 6560 ft	0 to 6560 ft	0 to 6560 ft
(China)	0 to 2000 m	0 to 2000 m	0 to 2000 m

Technical specifications	C1100TGX-1N24P32A	C1100TG-1N24P32A	C1100TG-1N32A
Altitude	0 to 10,000 ft	0 to 10,000 ft	0 to 10,000 ft
(rest of the world)	0 to 3050 m	0 to 3050 m	0 to 3050 m
Altitude (NEBS)	-200 to 13,000 ft at 40° C	-200 to 13,000 ft at 40° C	-200 to 13,000 ft at 40° C
Relative humidity	5% to 85%	5% to 85%	5% to 85%
Short-term humidity	5% to 95%	5% to 95%	5% to 95%
Acoustics: Sound pressure (typical/maximum)	45 dBA/71 dBA	45 dBA/71 dBA	45 dBA/71 dBA
Acoustics: Sound power (typical/maximum)	4.8 Bel/8.5 Bel	4.8 Bel/8.5 Bel	4.8 Bel/8.5 Bel
Temperature (nonoperating)	-40° to 158°F (-40° to 70°C)	-40° to 158°F (-40° to 70°C)	-40° to 158°F (-40° to 70°C)
Relative humidity (nonoperating)	5% to 95%	5% to 95%	5% to 95%
Altitude (nonoperating)	15,584 ft (4750 m)	15,584 ft (4750 m)	15,584 ft (4750 m)
Safety	UL 60950-1	UL 60950-1	UL 60950-1
	CAN/CSA C22.2 No. 60950-1	CAN/CSA C22.2 No. 60950-1	CAN/CSA C22.2 No. 60950-1
	EN 60950-1	EN 60950-1	EN 60950-1
	AS/NZS 60950.1	AS/NZS 60950.1	AS/NZS 60950.1
	IEC 60950-1	IEC 60950-1	IEC 60950-1
	GB-4943	GB-4943	GB-4943
	UL 62368-1	UL 62368-1	UL 62368-1
	CAN/CSA C22.2 No. 62368-1	CAN/CSA C22.2 No. 62368-1	CAN/CSA C22.2 No. 62368-1
	EN 62368-1	EN 62368-1	EN 62368-1
	AS/NZS 62368.1	AS/NZS 62368.1	AS/NZS 62368.1
	IEC 62368-1	IEC 62368-1	IEC 62368-1

Technical specifications	C1100TGX-1N24P32A	C1100TG-1N24P32A	C1100TG-1N32A
ЕМС	ICES-003 Class A	ICES-003 Class A	ICES-003 Class A
	EN55022 Class A	EN55022 Class A	EN55022 Class A
	CISPR22 Class A	CISPR22 Class A	CISPR22 Class A
	AS/NZS 3548 Class A	AS/NZS 3548 Class A	AS/NZS 3548 Class A
	VCCI V-3	VCCI V-3	VCCI V-3
	CNS 13438	CNS 13438	CNS 13438
	EN 300-386	EN 300-386	EN 300-386
	EN 61000 (Immunity)	EN 61000 (Immunity)	EN 61000 (Immunity)
	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
	EN50082-1	EN50082-1	EN50082-1
	KN22, KN24	KN22, KN24	KN22, KN24
Telecom	TIA-968-B	TIA-968-B	TIA-968-B
	CS-03	CS-03	CS-03
	ANSI T1.101	ANSI T1.101	ANSI T1.101
	ITU-T G.823, G.824	ITU-T G.823, G.824	ITU-T G.823, G.824
	IEEE 802.3	IEEE 802.3	IEEE 802.3
	RTTE Directive	RTTE Directive	RTTE Directive
	Homologation requirements vary by country and interface type. For specific country information, refer to the online approvals data base at: https://www.ciscofax.com/ .	Homologation requirements vary by country and interface type. For specific country information, refer to the online approvals data base at: https://www.ciscofax.com/ .	vary by country and interface type. For specific country information, refer to the online approvals data base at:
NEBS	GR-1089-CORE	GR-1089-CORE	GR-1089-CORE
	GR-63-CORE	GR-63-CORE	GR-63-CORE
Cisco IOS XE Software			
Protocols	IPv4, IPv6, static routes, Routing Information Protocol (RIP) v1 and v2, Open Shortest Path First (OSPF), Enhanced IGRP (EIGRP), Border Gateway Protocol (BGP), BGP Router Reflector, Multicast Internet Group Management Protocol (IGMP) v3, Protocol Independent Multicast sparse mode (PIM SM), PIM Source Specific Multicast (SSM), Embedded Event Manager (EEM), IKE, Access Control Lists (ACL), Dynamic Host Configuration Protocol (DHCP), DNS, Hot Standby Router Protocol (HSRP), RADIUS, AAA, Multiprotocol Label Switching (MPLS), IPsec, L2TPv3, Bidirectional Forwarding Detection (BFD)		
Encapsulations	Generic routing encapsulation (GRE), Ethernet, 802.1q VLAN, PPP, Serial (RS-232, X.25/XOT)		
Traffic management	QoS, Class-Based Weighted Detection (WRED), Hierarchic	Fair Queuing (CBWFQ), Weig	hted Random Early

Interfaces and modules supported

The Cisco 1100 Terminal Services Gateway provides a single NIM slot that supports a factory-installed single 16-port async terminal server card. The NIM slot can additionally support only the NIMs listed in Table 4.

Table 4. NIMs supported

Category	Modules
Ethernet modules	NIM-ES2-4 NIM-ES2-8
Wireless WAN modules	NIM-LTEA-EA NIM-LTEA-LA
Async modules	NIM-16A NIM-24A

Redundant power supply architecture

All C1100 TSG models provide for high availability for the power supply. The primary power supply is internal to the platform and may be ordered as an AC, DC or HVDC power supply. A second AC-only power supply may be connected to the platform as a redundant power supply. The two power supplies may be connected to the mains to provide for power redundancy. The internal power supply (AC, DC, or HVDC) acts as the primary power supply, while the external AC power supply automatically takes over upon the failure of the primary (internal) power supply.

Network Equipment Building System (NEBS) support

All C1100 TSG models (19-inch rack kit only) are certified for Level 3 of NEBS (Telcordia SR-3580 Level 3) while operating with a DC or AC power supply. When operating with the external AC power supply, the C1100 TSG is not certified for NEBS compliance. Please refer to Table 3 for more details.

Smart Software Licensing support

The C1100 TSG supports Smart Licensing by default. When ordering the C1100 TSG, customers must provide a Smart Account. All optional licenses purchased with the C1100 TSG will be deposited into the respective Smart or Virtual Account combination provided at the time of the order. Specific License Reservation (SLR) and factory installation of licenses ordered through SLR are supported on these platforms.

Smart Software Manager (SSM) is a simplified license management system that delivers visibility into customer license ownership and consumption. Licenses are managed through SSM, a central Cisco Smart License cloud portal. The cloud portal maintains an account of what the customer has bought and what they are using, thus alerting the customer if they go out of compliance. Customers can determine what licenses they own and how they are being used. Customers benefit from being able to pool available licenses, providing for more straightforward license usage across like platforms and thus decreasing operating costs.

Cisco IOS Software licensing and packaging

Universal Cisco IOS XE image

A single Cisco IOS XE Universal image encompassing all functions is delivered with the platform. Advanced features can be enabled simply by activating a software license on the Universal image. Technology packages and feature licenses, enabled through right-to-use licenses, simplify software delivery and decrease the operational costs of deploying new features.

Three major technology licenses are available on the Cisco 1100 Terminal Services Gateway; these licenses can be activated through the Cisco software activation process described at https://www.cisco.com/go/sa. The following licenses are available:

- IP Base: This technology package is available as the default.
- Application Experience (APP): This license includes data and application performance features.
- Security (SEC). This license includes features for securing network infrastructure.

The C1100 TSG supports Smart Licensing by default. All orders will require a Smart Account to be provided where the SEC and APP licenses will be deposited.

Ordering information

The C1100 TSG models may be ordered with the optional module and power supplies. To place an order, refer to Table 5 and visit the <u>Cisco Ordering homepage</u>.

Table 5. Ordering information

Product ID	Product description
C1100TG-1N32A	Cisco 1100 Terminal Services Gateway w/ 32 Async, 1 NIM (support for 2G DRAM)
C1100TG-1N24P32A	Cisco 1100 Terminal Services Gateway w/ 32 Async,24-layer 2 switch Port, 1 NIM with support for 4G DRAM
C1100TGX-1N24P32A	Cisco 1100 Terminal Services Gateway w/ 32 Async,24-layer 2 switch Port, 1 NIM with support for 8G DRAM
C1100TG-16A	16-port Async Module for Cisco 1100 Terminal Services Gateway

Table 6. Licensing information

Product ID	Product description
SL-1100TG-APP-K9	Application Experience License for Cisco 1100 Terminal Services Gateway
SL-1100TG-SEC-K9	Security License for Cisco 1100 Terminal Services Gateway

Table 7. Power supply options

Product ID	Product description
PWR-1100TG-AC	AC Power Supply for Cisco 1100 Term Gateway (Internal) ⁵
PWR-1100TG-DC	DC Power Supply for Cisco 1100 Term Gateway (Internal) ³
PWR-1100TG-HVDC	HVDC Power Supply for Cisco 1100 Term Gateway (Internal) ³
PWR-4320-AC	AC Power Supply for Cisco ISR 4320 (External) ⁶

Table 8. Rack-mount kit options

Product ID	Product description
ACS1100TG-RM19	Rack Mount Kit for Cisco 1100TG (19-inch and default)
ACS1100TG-RM23	Rack Mount Kit for Cisco 1100TG (23-inch)

Warranty information

The Cisco 1100 Terminal Services Gateway has a 90-day limited liability warranty.

Cisco and partner services for console services

Services from Cisco and our certified partners help you transform your network and data center, helping you accelerate business innovation and growth. We have the expertise to create a clear, replicable, optimized footprint across technologies. Planning and design services align technology with your business goals and can increase deployment efficiency. Technical services help you improve operational efficiency, save money, and mitigate risk. Optimization services help you continuously improve performance and succeed with new technologies. For more information, please visit https://www.cisco.com/go/services.

Cisco Smart Net Total Care® technical support for the Cisco 1100 Terminal Services Gateway is available on a one-time or annual contract basis. Support options range from help-desk assistance to proactive, onsite consultation. All support contracts include:

- · Major Cisco IOS Software updates for protocol, security, bandwidth, and feature improvements
- Full access rights to Cisco.com technical libraries for technical assistance, electronic commerce, and product information
- Access 24 hours a day to the industry's largest dedicated technical support staff

⁵ Internal power supplies are not field replaceable.

⁶ External power supply is for High Availability.

Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's <u>Corporate Social Responsibility</u>(CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	<u>Materials</u>
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

For more information

For more information about the Cisco 1100 Terminal Services Gateway, visit <u>Cisco.com/go/1100tsg</u> or contact your local Cisco account representative.

Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at https://www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned 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. (1110R)

Printed in USA C78-743689-00 05/20