Product Details

Description

The Cisco 300 Series, part of the Cisco Small Business line of network solutions, is a portfolio of affordable managed switches that provides a reliable foundation for your business network. These switches deliver the features you need to improve the availability of your critical business applications, protect your sensitive information, and optimize your network bandwidth to deliver information and applications more effectively. Easy to set up and use, the Cisco 300 Series provides the ideal combination of affordability and capabilities for small businesses, and helps you create a more efficient, better-connected workforce.

The Cisco 300 Series is broad portfolio of fixed-configuration managed Ethernet switches. Models are available with 8 to 48 ports of Fast Ethernet and 10 to 52 ports of Gigabit Ethernet connectivity, providing optimal flexibility to create exactly the right network foundation for your business. However, unlike other small business switching solutions that provide managed network capabilities only in the costliest models, all Cisco 300 Series Switches support the advanced security management capabilities and network features you need to support business-class data, voice, security, and wireless technologies. At the same time, these switches are simple to deploy and configure, allowing you to take advantage of the managed network services your business needs.

Features

Feature s	Benefits	
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High Perform ance and reliability

Cisco 300 Series Switches deliver the high availability and performance. It speed up file transfer times and improve slow, sluggish networks, while keeping your vital business applications available and preventing costly downtime. As a managed switching solution, the Cisco 300 Series also gives you the flexibility to manage and prioritize high-bandwidth traffic such as voice. That means you can empower your employees with state-of-the-art communication and productivity solutions, without draining the performance of your other business applications.

Fast, easy setup and configur ation

Cisco 300 Series Switches are designed to be easy to use and manage by small businesses and the partners who serve them. The included device manager software provides an intuitive, web-based interface to simplify setup, security, and quality of service (QoS) traffic prioritization, allowing even users without IT expertise to configure the switch in minutes. Cisco also provides a Cisco FindIT Network Discovery Utility. This utility that works through a simple toolbar on the user's web browser to discover Cisco devices in the network and display basic information, such as serial numbers and IP addresses, to aid in the configuration and deployment of Cisco Small Business products.

The Cisco 300 Series Switches provide a high level of security and give you fine- grained control to safeguard your network from unauthorized users. Advanced security features include:

- Embedded security to protect management data traveling to and from the switch and encrypt network communications.
- Extensive access control lists (ACLs) to restrict sensitive portions of the network from unauthorized users and guard against network attacks.
- Guest virtual LANs (VLANs) to let you provide Internet connectivity to nonemployee users while isolating critical business services from quest

traffic.

- Support for advanced network security
 applications such as IEEE 802.1X port security to
 tightly limit access to specific segments of your
 network. Web based authentication provides a
 consistent interface to authenticate all types of
 host devices and operating systems, without the
 complexity of deploying IEEE 802.1X clients on
 each endpoint.
- Time based ACLs and Port Operation restrict access to the network during predesignated times, such as business hours.

Strong Security

- Security mechanisms such as, Bridge Protocol Data Unit (BPDU) Guard and broadcast/ multicast/unknown unicast storm control, protect the network from invalid configurations or malicious intent.
- Secure Core Technology (SCT) helps ensure that the switch will receive and process management and protocol traffic no matter how much traffic is received.
- Advanced defense mechanisms, including
 Dynamic ARP Inspection (DAI), IP Source Guard,
 and Dynamic Host Configuration Protocol
 (DHCP) snooping, detect and block deliberate
 network attacks. Combinations of these
 protocols are also referred to as IPMB (IP-MAC port binding).
- IPv6 First Hop Security extends the advanced threat protection to IPv6. This comprehensive security suite includes ND inspection, RA guard, DHCPv6 guard and neighbor binding integrity check, providing unparalleled protection against a vast range of address spoofing and man in the middle attack on IPv6 networks.
- DOS (denial-of-service) attack prevention maximizes network uptime in the presence of an attack.
- Drotaction of management sessions using

Radius, TACACS+ and local database authentication as well as secure management sessions over SSL, SSH, and SNMPv3.

Power over Ethernet

Cisco 300 Series Switches are available with up to 48 PoE ports of Fast Ethernet or Gigabit Ethernet connectivity. This capability simplifies advanced technology deployments such as IP telephony, wireless, and IP surveillance by allowing you to connect and power network endpoints over a single Ethernet cable. With no need to install separate power supplies for IP phones or wireless access points, you can take advantage of advanced communications technologies more quickly, and at a lower cost. Some models support both IEEE 802.3af PoE and IEEE 802.3at PoE+ while others support IEEE 802.3af PoE only.

- The Cisco 1900 Series architecture provides energy-savings features that include the following:
 - Intelligent power management allowing you to control power to the modules based on the time of day. Cisco EnergyWise™ technology will be supported in the future.
 - Services integration and modularity on a single platform performing multiple functions optimizes raw-materials consumption and energy usage.
 - Platform flexibility and ongoing development of both hardware and software capabilities lead to a longer product lifecycle, lowering all aspects of the TCO, including materials and energy use.
 - High-efficiency power supplies are provided with each platform.

IP Phone Support

Investme nt Protectio n

Cisco 300 Series Switches include embedded QoS intelligence to prioritize delay-sensitive services such as voice and video, simplify unified communications deployments, and help ensure consistent network performance for all services. For example, automated voice VLAN capabilities let you plug any IP phone (including third-party phones) into your IP telephony network and receive an immediate dial tone. The switch automatically configures the device with the right VLAN and QoS parameters to prioritize voice traffic.

Network Automati c Voice Deploym ent

Using a combination of CDP, LLDP-MED, Auto Smartports, and VSDP (Voice Services Discovery Protocol – a unique patent-pending Cisco protocol), customers can deploy an end-to-end voice network dynamically. The switches in the network automatically converge around a single voice VLAN and QoS parameters and then propagate them out to the phones on the ports where they are discovered. For example, automated voice VLAN capabilities let you plug any IP phone (including third-party phones) into your IP telephony network and receive an immediate dial tone. The switch automatically configures the device with the right VLAN and QoS parameters to prioritize voice traffic.

Advance d network manage ment capabiliti es

- Static routing/ layer 3 switching between VLANs
- IPV6 Support
- Dual image support
- Dual Configuration diles support
- · Remote management
- Additional management options

Latest application specific integrated circuits support for IEEE 802.3 az Automatic power shutodd on ports when a link is down **Optimal Energy** Embedded intelligence to adjust signal strength **Efficienc** based on cable length Fanless design in most models, which reduces power consumption, increases reliability and provides quieter operation LEDs can be turned off to conserve power The Cisco 300 Series provides more ports per Gigabit Ethernet switch than traditional switch models, giving you more flexibility to connect and empower your business. Gigabit Ethernet models feature 28- and 52port switches, versus traditional devices that offer 20 or 44 ports with four shared ports giving you more value. The Cisco 300 Series also offers mini gigabit **Expansio** interface converter (mini-GBIC) expansion slots that n ports give you the option to add fiber-optic or Gigabit Ethernet uplink connectivity to the switch. With the ability to increase the connectivity range of the switches, you have more flexibility to design your network around your unique business environment, and to easily connect switches on different floors or across the business. Multi 7 language (English, French, German, Italian, Spanish, Japanese, and simplified Chinese) language

Specification

INTERFA CE	8 x 10Base-T/100Base-TX - RJ-45 - PoE; 1 x console - 9 pin D-Sub (DB-9) - management; 2 x 10Base-T/100Base-TX/1000Base-T - RJ-45 / SFP (combo)
MTBF	310,755 HOURS
Operating Temperat ure	Minimum:32F , Maximum: 104F
Storage Temperat ure	Minimum: -4F , Maximum:158F
Device Type	Switch -28 ports - L3 managed
Power over Ethernet	POE and POE +
Humidity Operating Range	10-90% (non condensing)
Humidity Storage Range	10-90% (non-condensing)
Routing Protocol	Static IPV4 routing
Width	11 inches
Performa nce	Switching capacity: 56 Gbps Forwarding performance: 41.67 Mpps

Jumbo Frame Support	9KB
Authentic ation Method	Secure Shell (SSH), RADIUS, TACASCS+
Flash Memory	16 MB
Localizati on	Chinese, English, German, French, Italian, Spanish, Japanese
Ram	128MB
Status Indicator	Link Activitiy, Port Transmission Speed, System
MAC Address Table Size	16K entries
Capacity	4K Active VLANs
Ports	26- port Gigabit + 2 x combo Gigabit SFP

Technical Specification

Capacity in Millions of Packets per Second (mpps) (64-byte packets)	41.67
Switchin g Capacity in Gigabits per Second (Gbps)	56.0
Spanning Tree Protocol (STP)	Standard 802.1d Spanning Tree support Fast convergence using 802.1w (Rapid Spanning Tree [RSTP]), enabled by default 8 instances are supported Multiple Spanning Tree instances using 802.1s (MSTP)
Port Grouping	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP) • Up to 8 groups • Up to 8 ports per group with 16 candidate ports for each (dynamic) 802.3ad link aggregation •

VLAN	Support for up to 4096 VLANs simultaneously Portbased and 802.1Q tag-based VLANs MAC-based VLAN Management VLAN Private VLAN Edge (PVE), also known as protected ports, with multiple uplinks Guest VLAN Unauthenticated VLAN Dynamic VLAN assignment via Radius server along with 802.1x client authentication CPE VLAN
Voice VLAN	Voice traffic is automatically assigned to a voice- specific VLAN and treated with appropriate levels of QoS. Auto voice capabilities deliver network-wide zero touch deployment of voice endpoints and call control devices.
Multicast TV VLAN	Multicast TV VLAN allows the single multicast VLAN to be shared in the network while subscribers remain in separate VLANs (Also known as MVR
Q in Q VLAN	VLANs transparently cross a service provider network while isolating traffic among customers

Generic VLAN Registrat ion Protocol (GVRP)/ Generic Attribute Registrat ion Protocol (GARP)	Protocols for automatically propagating and configuring VLANs in a bridged domain
Unidirect ional Link Detection	UDLD monitors physical connection to detect unidirectional links caused by incorrect wiring or cable/port faults to prevent forwarding loops and blackholing of traffic in switched networks
Dynamic Host Configur ation Protocol (DHCP) Relay at Layer 2	Relay of DHCP traffic to DHCP server in different VLAN. Works with DHCP Option 82
Internet Group Manage ment Protocol (IGMP) versions 1,2 and 3 snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 1K multicast groups (source-specific multicasting is also supported)

Layer 3

IPv4 routing, classess inter- domain routing, layer 3 interface, DHCP relay at layer 3, user datagram protocol (UDP) relay, DHCP Server

Security

Secure shell protocol, secure sockets layer (SSL), IEEE 802.1X, Web Based Authentication, STP Bridge Protocol Data Unit (BPDU) Guard, STP Root Guard, DHCP snooping, IP Source Guard (IPSG), Dynamic ARP Inspection (DAI), IP/MAC/PORT Binding, Secure Core Technology, Secure Sensitive Data(SSD), Layer 2 isolation Private VLAN Edge (PVE) with community VLAN, Port security, RADIUS/TACACS+, Storm control. RADIUS accouting, DoS prevention, ACLs (Support up to 512 rules)

Standard s

IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab1000BASE-T Gigabit Ethernet, IEEE 802.3ad LACP, IEEE 802.3z Gigabit Ethernet, IEEE802.3x Flow Control, IEEE 802.1D (STP, GARP, and GVRP), IEEE 802.1Q/p VLAN, IEEE802.1w RSTP, IEEE 802.1s Multiple STP, IEEE 802.1X Port Access Authentication, IEEE802.3af, IEEE 802.3at, RFC 768, RFC 783, RFC 791, RFC 792, RFC 793, RFC 813, RFC 879, RFC 896, RFC 826, RFC 854, RFC 855, RFC 856, RFC 858, RFC 894, RFC 919, RFC 922, RFC 920, RFC 950, RFC 1042, RFC 1071, RFC 1123, RFC 1141, RFC 1155, RFC 1157, RFC 1350, RFC 1533, RFC 1541, RFC 1624, RFC 1700, RFC 1867, RFC 2030, RFC 2616, RFC 2131, RFC 2132, RFC 3164. RFC 3411. RFC 3412. RFC 3413. RFC 3414, RFC 3415, RFC 2576, RFC 4330, RFC 1213, RFC 1215, RFC 1286, RFC 1442, RFC 1451, RFC 1493, RFC 1573, RFC 1643, RFC 1757, RFC 1907, RFC 2011, RFC 2012, RFC 2013, RFC 2233, RFC 2618, RFC 2665, RFC 2666, RFC 2674, RFC 2737, RFC 2819, RFC 2863, RFC 1157, RFC 1493, RFC 1215, RFC 3416

Power Dedicate d to PoE	180W (PoE + Suppoerted)
Number of ports that support PoE	24
Ports	Total System Ports: 28 Gigabit Ethernet RJ-45 Ports: 26 Gigabit Ethernet Combo ports: 2 Gigabit Ethernet Combo
CPU memory	128 MB
Packet Buffer	8 MB
Power	100-240V 47-63 Hz, internal, universal