ES3628C

L3 Fast Ethernet Switch

Product Overview

The Edge-Core ES3628C is a Fast Ethernet Layer 3 stackable switch featuring 24 10/100 RJ-45 ports, 2 GE RJ-45 and 2 GE SFP ports. It is an ideal workgroup layer 3 switch, grouping users based on department, reducing traffic in separate departments from interfering with each other as well as providing security, while still routing unicast traffic between different vlans or subnets. Using IP Clustering for a virtual stack of up to 36 switches. The whole stack can be managed as a single entity with a single IP address. This switch is enhanced security and advanced QoS to the network edge, while maintaining simplicity of management.

Key Features and Benefits

Performance and Scalability

With 12.8Gbps switching capacity, the ES3628C delivers wire-speed performance for Layer 2 switching and Layer 3 IP routing on all ports.

Reducing broadcast traffic from lowering network performance, providing security between different vlans, yet allowing unicast traffic to be routed.

The ES3628C can use single IP to stack up to 36 units. The whole stack can be managed as a single entity with a single IP address.

Continuous Availability

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence.

IEEE 802.1s Multiple Spanning Tree Protocol runs STP per VLAN base, providing Layer 2 load sharing on redundant links.

IEEE 802.3ad (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and providing load balancing and fault tolerance for uplink connections.

IGMP snooping prevents flooding of IP multicast traffic and limits bandwidth intensive video traffic to only the subscribers.

Optional Redundant Power Supply provides uninterrupted power.

Comprehensive QoS

8 egress queues per port enable differentiated management of up to 8 traffic types

Traffic is prioritized according to 802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allows maximum control of network resources.

Enhanced Security

Port Security ensures access to a switch port based on MAC address.

IEEE 802.1x port-based and MAC-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based RADIUS server.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses, TCP/UDP ports.

SSH , RADIUS and TACACS+ protect data communication and ensure data privacy.

Private VLAN isolates edge ports to ensure user privacy.

Simple Management

Industry standard Command Line Interface (CLI) via console port or Telnet provides a common user interface and command set for users to manipulate the switch.
Embedded user friendly web interface helps users quickly and simply configure switches.
Four groups of RMON are supported.
Backup and restore firmware and configuration files via TFTP.

L3 Features

The ES3628C delivers high-performance, hardware based IP routing.

RIP and OSPF provide dynamic routing by exchanging routing information with other Layer 3 switches or routers.

DVMRP, PIM-DM Multicast Routing Protocols send IP multicast traffic from one subnet to another.

VRRP prevents your system from failing by dynamically backing up multiple L3 switches for routing.

Ethernet Switch

ES3628C Product Specifications

Features

Physical Ports

24 RJ-45 10/100Base-X ports
2 10/100/1000 RJ-45 ports
2 10/100/1000 SFP ports
1 RS-232 DB-9 console port
1 Redundant Power Supply Connector

Performance

Switching Capacity: 12.8Gbps
Forwarding Rate: 9.5Mpps
MAC Address Table Size: 16K
Packet Buffer Size: 32MB

L2 Features

Auto-negotiation for port speed and duplex mode
Flow Control: IEEE 802.3x & Back-Pressure
Spanning Tree Protocol:
- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

VLANs:
- Supports 4K IEEE 802.1Q VLANs, Port-based VLANs, GVRP
- Private VLAN
- QinQ / Protocol-based VLAN

Link Aggregation:
- Static Trunk, IEEE 802.3ad Link Aggregation Control Protocol
- Max. groups:8, ports/trunk group: 2~8 ports

MRPP(Multi-layer Ring Protection Protocol , Enhanced EAPS)
IGMP Snooping:
- IGMP v1/2/3 and IGMP snooping
- IGMP Query/ Multicast VLAN (MVR)

Supports jumbo frames up to 9KB

L3 Features

4K IP Address entries
16K static routes
ARP, ARP Proxy
Multi-netting, Super-netting (CIDR)
RIPv1, RIPv2,OSPFv2
DVMRP, PIM-DM, PIM-SM
VRRP
DHCP/BootP relay
DHCP server

QoS Features

Priority Queues: 8 hardware queues per port
Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List
Supports SWRR, WRR and Strict scheduling
Bandwidth Control:
- Egress rate limiting: 64Kbps granularity
- Ingress rate limiting: 64Kbps granularity

Security

Supports IEEE 802.1X port-based and MAC-based access control
RADIUS / TACACS+ authentication
Access Control List
SSH (v1.5/v2.0)
Prevent ARP/ND Spoofing

Management

Switch Management:
- CLI via console port or Telnet
- WEB management
- SNMP v1, v2c,v3

Firmware & Configuration:
- Dual firmware images
- Firmware upgrade via TFTP/FTP/xmodem

Supports RMON (groups 1, 2, 3 and 9)
Supports BOOTP, DHCP for IP address assignment
Supports SNTP
Event/Error Log/Syslog

Mechanical

Dimensions (H x W x D): 4.4 x 44.0 x 23.0 cm (1RU)
LED Indicators: Port, Uplink, System, Diagnostic

Safety

CSA/NRTL (UL1950, CSA 22.2.950)
TUV/GS (EN60950)
CB

Electromagnetic Compatibility

CE Mark
FCC Class A
VCCI Class A

Power Supply

AC Input
■100 to 240 V, 50-60 Hz, 0.8A
Power Supply
•Internal, auto-ranging transformer: 90 to 240 VAC, 47 to 63 Hz
•External, supports connection for 14-pin redundant power supply
Power Consumption
•28.44 Watts maximum

Environmental Specifications

Temperature:
- IEC 68-2-14
- 0℃ to 50℃ (Standard Operating)
- -40℃ to 70℃ (Non-Operating)

Humidity: 5% to 95% (Non-condensing)
Vibration: IEC 68-2-36, IEC 68-2-6
Shock: IEC 68-2-29
Drop: IEC 68-2-32

Warranty

Limited lifetime warranty

Ordering Information

Optional Accessories	Product Description
RPS600WA	4 DC output redundant power supply connectors (Supports Max. power output 150W/12V per port)
ET4201-SX	SFP Optical Transceiver (Distance: 500m; Wavelength: 850nm; MMF)
ET4201-LX	SFP Optical Transceiver (Distance: 10km; Wavelength: 1310nm; SMF)
ET4201-LHX	SFP Optical Transceiver (Distance: 40km; Wavelength: 1310nm; SMF)
ET4201-ZX	SFP Optical Transceiver (Distance: 80km; Wavelength: 1550nm; SMF)

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*: Check for the availability

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