

ES3628EA

L3 Fast Ethernet Stackable Switch



Product Overview

The Edge-Core ES3628EA 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 24 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 ES3628EA delivers wire-speed and Non-blocking 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 ES3628EA can use single IP to stack up to 24 units. This technology provides some of the benefits of stackable switches without requiring direct stacking or connections between switch units.

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. Filter or limits the total number of devices from using a switch port and protects from MAC flooding attacks.

IEEE 802.1X port-based access control (login) 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.

SSL, Web Management Encryption, 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 ES3628EA 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.



Features

Physical Ports

24 RJ-45 10/100Base-X ports
 2 10/100/1000 RJ-45 ports
 2 10/100/1000 SFP (SX/LX/LHX/ZX) 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
 Store & Forward switching methods
 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 255 IEEE 802.1Q VLANs, Port-based VLANs, GVRP
 ■ IEEE 802.1v Protocol-based VLANs, VLAN Taggings
 ■ Private VLAN
 Link Aggregation:
 ■ Static Trunk, IEEE 802.3ad Link Aggregation Control Protocol
 ■ Trunk groups: 6, Trunk links: 2-8
 IGMP Snooping:
 ■ IGMP v1 and v2 snooping
 ■ IGMP Queried
 Supports jumbo frames up to 9KB

L3 Features

4K IP Address entries
 256 static routes
 ARP
 Multi-netting, Super-netting (CIDR)
 RIPv1, RIPv2
 OSPF
 DVMRP, PIM-DM
 VRRP
 DHCP/BootP relay
 DHCP server
 DNS proxy

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 WRR and Strict scheduling
 Bandwidth Control:
 ■ Egress rate limiting: 64Kbps, 100Mbps granularity
 ■ Ingress rate limiting: 64Kbps, 100Mbps granularity
 Broadcast Storm Control prevents faulty end stations from degrading
 overall system performance.

Security

Supports IEEE 802.1X port-based access control
 RADIUS authentication
 TACACS+
 Access Control List
 SSH (v1.5/v2.0), SSL

Management

Switch Management:
 ■ CLI via console port or Telnet
 ■ WEB management
 ■ SNMP v1, v2c, v3
 Firmware & Configuration:
 ■ Dual firmware images
 ■ Firmware upgrade via TFTP server
 ■ Multiple configuration files
 ■ Configuration file upload/download via TFTP server
 Supports RMON (groups 1, 2, 3 and 9)
 Supports BOOTP, DHCP for IP address assignment
 Supports SNMP
 Event/Error Log/Syslog

Mechanical

Dimensions (H x W x D): 4.4 x 44 x 23 cm (1RU)
 19" rack-mount metal case
 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

Environmental Specifications

Temperature:
 ■ IEC 68-2-14
 ■ 0°C to 50°C (Standard Operating)
 ■ -40°C to 70°C (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

3 yrs. warranty

Ordering Information

Optional Accessories

RPS600WA

ET4201-SX
 ET4201-LX
 ET4201-LHX
 ET4201-ZX

Product Description

4 DC output redundant power supply connectors (Supports Max. power output 150W/12V per port)

Small Form Factor Pluggable (Distance: 500m; Wavelength: 850nm)
 Small Form Factor Pluggable (Distance: 10km; Wavelength: 1310nm)
 Small Form Factor Pluggable (Distance: 40km; Wavelength: 1310nm)
 Small Form Factor Pluggable (Distance: 80km; Wavelength: 1550nm)