

ES4625/ES4649 L3 Gigabit Ethernet Stackable Switch



Product Overview

The Edge-Core ES4625 and ES4649 are Gigabit Ethernet Layer 3 Stackable switches with 10 Gigabit Ethernet uplinks featuring 20 or 44 10/100/1000 RJ-45 ports, 4 combo Gigabit Ethernet RJ-45/SFP ports and 1 slot for an optional 10GE module. The ES4625/ ES4649 is ideal for aggregating servers in the distribution layer of three-tier networks, providing high performance, wire speed L2 switching and L3 routing. It is also an excellent choice as a small enterprise core switch for Gigabit to the Desktop migration.

Ethernet Switch

Key Features and Benefits

Performance and Scalability

The ES4625/ES4649 provides 1 optional 10 Gigabit Ethernet module for 10G uplink to fulfill any bandwidth-eager customer.

Optional 10 Gigabit Ethernet XENPAK transceivers can be chosen for different distance fiber uplinks.

Start stacking up to 8/4 units for a total of 192 10/100/1000 ports and 8 10G ports for pay as your network expands style.

A switch stack can be managed with a single IP address and as a single entity for greater management simplicity.

40 Gbps stacking bandwidth for intra-switch data transfer.

Backup Master ensures the availability of a master controller for network control at any time.

Redundant Stacking ensures continued operation of other units while adding or removing a unit, or in the unlikely event of unit or stacking cable failure.

Firmware and configuration are automatically upgraded from master to slave units for management simplicity.

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 Link Aggregation Control Protocol (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.

L3 Features

The ES4625/ES4649 delivers high-performance, hardware based IP routing.

RIP and OSPF provides 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.

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.

Bidirectional rate-limiting, per port or traffic class, preserves network bandwidth and allows full control of network resources.

Enhanced Security

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers.

SSL, Web Management Encryption, RADIUS and TACACS+ protect data communication and ensure data privacy.

Simple Management

Industry standard Command Line Interface (CLI) via console port or Telnet can be used for switch management.

Embedded user friendly web interface helps users quickly and simply configure switches.

Support four groups of RMON.

Backup and restore Firmware and configuration files via TFTP.

ES4625/ES4649 Product Specifications

Features

Physical Ports

20 or 44 RJ-45 10/100/1000Base-T ports
4 Combo G (RJ-45/SFP) ports
1 optional I/O module for 10G uplink or 8-port Gigabit SFP
1 RS-232 DB-9 console port
1 Redundant Power Supply Connector

Performance

Switching Capability: 108Gbps/156Gbps
Forwarding Rate: 80.4Mpps/116Mpps
MAC Address Table Size: 16K
Packet Buffer Size: 2MB/4MB

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 255 IEEE 802.1Q VLANs, port-based VLANs, GVRP
- IEEE 802.1v Protocol-based VLANs
- 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 and IGMP Querier
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

Stacking Features

Stacking Bandwidth: 40Gbps
Stacking up to 8/4 units for ES4625/ES4649 thus increasing port density to 192 Gigabit Ethernet ports and 8 10GE ports
Mixed stacking flexibility (ES4625/ES4649)

QoS Features

Priority Queues: 4 hardware queues per port
Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List
Supports Marking and Re-marking
Supports WRR and Strict scheduling
Bandwidth Control:

- Egress rate limiting, Ingress rate limiting

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 SNTF
Event/Error Log/Syslog
(optional) ECview is a powerful network management software that maximizes the managed capabilities of Edge-Core devices:

- Topology Management
- Performance Management
- Configuration Management
- Event Management
- SNMP Management

Mechanical

Dimensions (H x W x D): 44 x 440 x 415 mm (1RU)
LED Indicators: Port, Uplink, System, Diagnostic, Stack/Master

Safety

CSA/NRTL (UL60950, CSA 22.2.No 60950-00)
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

Limited lifetime warranty

Ordering Information

Optional Accessories

RPS600WA

EM4626H-XG-XFP
EM4625-STKCABLE-S
EM4625-STKCABLE-S
ET5401A-LR
ET4201-SX /ET4201-LX /ET4201-LHX /ET4201-ZX

ECview

Product Description

4 DC output redundant power supply connectors (Supports max. power output 150W/12V per port)
1 port 10GBase-LR module with XFP connector
Stacking cables length 30cm/1.3m for inter switch stacking connection
10GE XENPAK Optical Transceiver (Link length: 10km; Laser: 1310nm)
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)
SNMP Network Management Software



Powered by Accton

TEL: 886-3-5053801 FAX: 886-3-5780764
No.1, Creation Rd. III, Science-based Industrial Park Hsinchu Taiwan 30077
sales_ec@edge-core.com
www.edge-core.com

DS_ES4625_4649_V01
2006. 05.