



# ES4624-SFP/ES4626-SFP

## L3 Gigabit Ethernet Switch



### Product Overview

The Edge-Core ES4624-SFP and ES4626-SFP are Gigabit Ethernet layer 3 switches with 16 SFP Gigabit Ethernet ports plus 8 combo Gigabit Ethernet RJ-45/SFP ports. In addition to 24 gigabit ports, ES4626-SFP also includes dual 10-Gigabit uplink ports.

The ES4624-SFP/ ES4626-SFP is ideal for use in the distribution layer of three-tier networks provides long distance fiber connections to aggregate access layer switches that are dispersed in different locations. It also an excellent choice as a core switch for small/middle enterprises.

### Key Features and Benefits

#### Performance and Scalability

With 48Gbps/88Gbps switching capacity, the ES4624-SFP /ES4626-SFP delivers high performance IPv4 and IPv6 IP routing.

The SFP-based Gigabit ports support various optional Gigabit Ethernet mini GBIC transceivers, available by Edge-Core, for different distance fiber connections. The 10 Gigabit Ethernet connectivity of ES4626-SFP is accomplished via 10 Gigabit XFP transceiver which is hot-pluggable, supports distances up to 300 meters over multimode fiber and 10 to 40km over single-mode fiber.

IP stacking is up to 36 switches virtual stacking together. 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 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.

#### 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 and MAC-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\*, SSH, RADIUS and TACACS+ authentication protect data communication and ensure data privacy.

#### Simple Management

TFTP can be used to backup or restore firmware and configuration files.

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 (1,2,3,9 Group). Backup and restore Firmware and configuration files via TFTP.

#### L3 Features

The ES4624-SFP/ES4626-SFP delivers high-performance, hardware based IP routing.

RIP ,OSPF and BGP4+ provides dynamic routing by exchanging routing information with other Layer 3 switches or routers.

DVMRP, PIM-DM, PIM-SM 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.

#### IPv6 Support

The ES4624-SFP/ES4626-SFP supports IPv6 routing in hardware for maximum performance. As more network devices growing and the need for larger addressing and higher security become critical, the ES4624-SFP/ES4626-SFP will be a right product to meet the requirement.

Ethernet Switch

# ES4624-SFP/ES4626-SFP Product Specifications



## Features

### Physical Ports

- 16 SFP ports
- 8 Combo G (RJ-45/SFP) ports
- 2 optional I/O Slots for 10G uplink (ES4626-SFP only)
- 1 mini-USB console port Management

### Performance

- Switching Capacity: 48Gbps/88Gbps
- Forwarding Rate: 38.71Mpps/65.47Mpps
- MAC Address Table Size: 16K

### 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)
- MRPP(Multi-layer Ring Protection Protocol , Enhanced EAPS)
- VLANs:
  - Supports 4K IEEE 802.1Q VLANs
  - Port-based /Protocol –based /MAC-based /IP subnet VLAN
  - Private VLAN
  - GVRP
  - QinQ/ VLAN Translation
- Link Aggregation:
  - Static Trunk, IEEE 802.3ad Link Aggregation Control Protocol
  - Max. groups: 8, ports/trunk group:2-8 (Gigabit port) or 2 (10Gigabit port)
- IGMP v1/2/3 , IGMP Snooping and IGMP Querier
- Multicast VLAN (MVR)
- Jumbo Frame

### L3 Features

- 8K IP Address entries
- 6K static routes
- ARP
- Multi-netting, Super-netting (CIDR)
- RIPv1, RIPv2, OSPF, BGP4
- DVMRP, PIM-DM , PIM-SM
- VRRP
- PBR (Policy based routing)
- DHCP/BootP relay, DHCP server
- DHCP Snooping\*/Option82\*

### Security

- Port Security
- Supports IEEE 802.1X port-based and MAC based access control
- RADIUS Authentication
- TACACS+ Authentication
- Access Control List
- Prevent ARP/ND Spoofing
- SSH /SSL\*

### 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, Marking
- DiffServ
- Supports SWRR, WRR and Strict scheduling
- Port Rate Limiting
- Egress rate limiting, Ingress rate limiting

## Ordering Information

### Optional Accessories

- ET4201-SX
- ET4201-LX
- ET4201-LHX
- ET4201-ZX
- ET5302-SR
- ET5302-LR
- ET5302-ER

### IPv6 Features

- IPv6 hardware IP routing
- IPv4/IPv6 Dual Protocol
- IPv6 Tunneling
- IPv6 Routing
  - Static Route, RIPng, OSPFv3, MBGP4+
- IPv6 Multicast
  - MLD Snooping, MLD v1/2, PIM-SM, PIM-DM
- IPv6 Neighbor Discovery
- IPv6 ACL
- HTTP / Telnet over IPv6
- IPv6 Ping/Traceroute
- IPv6 Syslog/SNTP
- IPv6 FTP/TFTP Support
- SNMP IPv6

### 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 server
- Supports RMON (groups 1, 2, 3 and 9)
- Supports Port Mirroring
- Supports SNTP
- Event/Error Log/Syslog
- sFlow

### Mechanical

- Dimensions (H x W x D): 44 x 440 x 420 mm (1RU)
- Weight: 4 kg (8.8 lbs)
- LED Indicators: Power, Run, Port status

### Power Supply

- Power Requirement: AC Input: 90~264 V, 50~60 Hz, 2 A
- Power Consumption: Max. 80W

### 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

## Product Description

- SFP Optical Transceiver (Distance: 500m; Wavelength: 850nm; MMF)
- SFP Optical Transceiver (Distance: 10km; Wavelength: 1310nm; SMF)
- SFP Optical Transceiver (Distance: 40km; Wavelength: 1310nm; SMF)
- SFP Optical Transceiver (Distance: 80km; Wavelength: 1550nm; SMF)
- XFP 10G Transceiver 300M
- XFP 10G Transceiver 10KM
- XFP 10G Transceiver 40km