ZyXEL

Premium 10G Aggregation Switch Secures Non-Stop Network Services

- 24 Dual-personality Gigabit Ports
- Two Built-in 12G Stacking Interfaces
- 1 Open Slot for Optional 2 10-Gigabit Uplink Module
- L3 Advanced Routing Protocols, OSPF, VRRP and DVMRP
- 16 K L2 MAC Address Table/ 8K IP Address Table/ 8K Routing Path
- Multilayer-aware (L2/L3/L4) ACL for Security Protection and Traffic Optimization
- Port Security and Enhanced 802.1x Port Authentication
- Backup Power System Support

Stackable 24-port L3 Gigabit Switch with optional 10G uplinks

XGS-4728F

Benefits

Unique 24 GbE Copper and Fiber Connectivity in 1U-height Design

ZyXEL XGS-4728F Gigabit Ethernet Access Switch provides high-performance switching functionalities to triple-play services such as Internet data exchange, Web surfing, IPTV and VoIP telephony. The advantages not only fulfill customer needs but also enable service providers to generate more profit.

Unlike competitors' offering of individual models for GbE copper and fiber connectivity, the leading architecture employed by XGS-4728F delivers 24 1000Base-T copper interfaces along with standard RJ-45 connectors and 24 SFP slots in a 19" 1U enclosure. This unique benefit gives network designers the highest flexibility and cost saving in terms of equipment investment, network administration and system maintenance.

Built-in Stacking Ports Eliminate Hidden Network Expansion Cost

With two high-performance 12G stacking ports on the back panel, over 10 units of the XGS-4728F can be easily hard-stacked in a ring architecture; this feature makes the XGS-4728F highly scalable and eases the network expansion and administration. Moreover, as the stacking ports come with every XGS-4728F unit, customers have no need to spend extra for stacking modules and stacking cables.

True Wire-speed L3 Switching for High-Performance Networks

Each XGS-4728F provides 144 Gbps switching capacity for wire-speed performance delivered on all GbE copper/fiber ports within the stack, as well as stacking ports and optional 10G uplinks. In addition, advanced L3 switching, multicasting, resiliency including OSPF, DVMRP, VRRP also help delivering optimal performance to the entire network.

Build-Up Large Networking Environment

The XGS-4728F designed for large Internet Services Provider and Telco market, increasing network capability scare and provide fast efficient solution for customer. 16 K MAC Entries/8 K Routing Path is an idea for large Internet services.

Specifications

Standard Compliance
- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX Ethernet
- IEEE 802.ab 1000Base-T Ethernet
- IEEE 802.3x Flow control
- IEEE 802.1D Spanning tree protocol
- IEEE 802.1w Rapid Spanning tree protocol
- IEEE 802.1s Multiple Spanning tree protocol
- IEEE 802.1p Class of service, priority protocols
- IEEE 802.1Q VLAN tagging
- IEEE 802.1x Port Authentication
- IEEE 802.3ad LACP aggregation

Performance
- 144 Gbps non-blocking switching fabric
- Switching Forwarding Rate 100 Mpps (1488000 pps/1000Base-T, 148800 pps/ 100Base-TX)
- Wire-speed performance

MAC and Packet Buffer
- 16K MAC Address
- 768K Packet Buffer

Traffic Management and QoS
- Rate Limiting: Rule-based/Port-based bandwidth control, 64 kbps granularity
- Dual-Rate-Three-Color
- CIR/PIR for bandwidth control
- Port-based egress traffic shaping
- Broadcast Storm Control
- IEEE 802.1p with 8 priority queues per port for different traffic types
- WFR (Weighted Fair Queue)/WRR (Weighted Round Robin)/SPQ scheduling algorithm
- DSCP/DSCP to 802.1p priority mapping
- IGMP/IGMP snooping v1, v2, v3
- MVR
- Congestion control on all ports

IP Routing and Service Features
- 64 IP routing domains
- 8 K IP address table
- Wire-speed IP forwarding
- RIP v1, v2
- 12K Routing Entries
- IGMP v1, v2, v3
- DHCP Server/Relay

Link Aggregation
- IEEE 802.3ad LACP link aggregation
- Static manually port trunking
- Up to 6 aggregation groups, 8 ports/per group randomly selected

Resilient Network
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- BPS (Backup Power System)

User Security and Authentication
- IEEE 802.1Q tag-based and port-based VLAN
- Support GVRP, automatic VLAN member registration
- 1K Static VLANs, up to 4K dynamic VLAN
- Full range 4 K PVID support
- Port-base VLAN & VLAN isolation
- IP Classification VLAN
- Intrusion Lock
- MAC Freeze
- MAC filtering per port
- Port security
- Limited MAC number per port
- IP Source Guard
- Loop Guard
- RADIUS MAC login
- IP Filtering
- TCP/UDP Socket Filtering
- BPDU transparency
- 802.1x port-based authentication
- Accounting by TACACS+ and RADIUS

Network Administration Security
- User name/password required for Web/Telnet/ local console administrators
- Two-level security by specific SNMP read/write community
- Multiple login session
- Multiple access permission management
- SSH v1/v2
- SSL/TLS

Network Management
- ZyXEL iStacking™, up to 24 switches managed by single IP address
- Web-based management
- Telnet CLI
- SNMP v1, v2c, v3
- RS-232c Local console
- IP management: static IP or DHCP Sever/Relay
- RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms, and events)
- Port mirroring: Source/Destination/Both port mirroring

Intelligent ACL (L2/L3/L4 Access List Control)
- Based on MAC address
- Based on VLAN
- Based on IP address
- Based on Protocol type
- Based on TCP/UDP type
- Based on DSCP

Hardware Specifications
- Support of auto-negotiation
- Support of auto MDI/MDI-X
- Console: D-Sub 9 pin Female (DCE)
- Management: 1 out-of-band management RJ-45 port
- Ports: 24 GbE dual-personality (RJ-45 or SFP slot) ports + 2 12G stacking ports + 1 uplink slot for 2 10G capacity

Physical Specifications
- Dimensions: 438 (W) x 310 (D) x 44.45 (H) mm
- Weight: 7 Kg

Power Requirements
- AC version (100-240 VAC, 50-60 Hz) or DC version (-36 to -72V)
- MW (PPS-125-12) 100 W, 12 V@8.5 Amps
- Backup power supply supported

Environmental Specifications
- Operating temperature: 0°C ~ 45°C
- Storage temperature: -25°C ~ 70°C
- Humidity: 10% ~ 90% (non-condensing)

Certification
- UL 60950-1
- CSA 60950-1
- EN 60950-1
- IEC 60950-1

For more product information, visit us on the web at www.ZyXEL.com

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