Product Specifications

24-Port 10/100/1000T +

4-Port 10G SFP+

Managed Ethernet Switch

ZTP-2311-24GT4X

PRODUCT DESCRIPTION

Front Panel:

Rear Panel:

Powerful 10Gbps Layer 2 switching and Layer 3 Routing Solution for Enterprise Backbone and Data Center Networking

Zekko ZTP-2311-24GE4SFP+ is a brand-new Layer 2 Managed Gigabit Switch with 10Gbps uplink capability for various kinds of network applications and flexible deployment. The ZTP-2311-24GE4SFP+ features 24 10/100/1000BASE-T RJ45 copper ports and 4 1G/10GBASE-X SFP+ ports with 128Gbps switch fabric delivered in a 1U rugged case with fanless design.

The ZTP-2311-24GE4SFP+ provides high-density performance, Layer 3 static routing, RIP (Routing Information Protocol) and OSPF (Open Shortest Path First). With 10Gbps interfaces and 128Gbps switching fabric, the ZTP-2311-24GE4SFP+ can handle extremely large amounts of data in a secure topology linking to an enterprise backbone or high-capacity servers. The powerful network security features make the ZTP-2311-24GE4SFP+ perform effective data traffic control for ISP and enterprise VoIP, video streaming, and multicast applications.

High Performance 10Gbps Ethernet Capacity

The four SFP+ ports built in the ZTP-2311-24GE4SFP+ boast a high-performance switch architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as up to 128Gbps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Each of the SFP+ ports supports Dual-Speed, 10GBASE-R/LR or 1000BASE-SX/LX, meaning the administrator now can flexibly choose the suitable SFP/SFP+ transceiver according to the transmission distance or the transmission speed required to extend the network efficiently.

Redundant Ring, Fast Recovery for Critical Network Applications

The ZTP-2311-24GE4SFP+ supports redundant ring technology and features strong, rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates advanced ITU-T G.8032 ERPS (Ethernet Ring Protection Switching) technology and Spanning Tree Protocol (802.1s MSTP) into customer's network to enhance system reliability and uptime in harsh environments. In a certain simple Ring network, the recovery time could be less than 15ms to quickly bring the network back to normal operation.

FUNCTION SPECIFICATIONS

Product	**ZTP-2311-24GE4SFP+**
Copper Ports	24 10/100/1000BASE-T RJ45 copper ports (ports 1 to 24)
10G SFP+ Ports	4 10GBASE-SR/LR SFP+ interfaces (ports 25 to 28) Backward compatible with 1000BASE-SX/LX/BX SFP transceiver
Console Port	1 x RJ45-to-RS232 serial port (9600, 8, N, 1)
CPU	MIPS 800MHz
RAM	512Mbytes
Flash Memory	32Mbytes
Dimensions (W x D x H)	440 x 207 x 44mm
Weight	2742g
Power Consumption	23.2 watts/79.11 BTU
Power Requirements- AC	AC 100~240V, 50/60Hz
Fan	--
LED	**System:** PWR (Green), SYS (Green) **Ports:** LNK/ACT (Green)
Switching Specifications	
Switch Architecture	Store-and-forward
Switch Fabric	128Gbps/non-blocking
Switch Throughput	95.23Mpps
Address Table	32K MAC address table with auto learning function
ARP Table	8K
Routing Table	6K
IP Interface	1024
ACL Table	2K
Shared Data Buffer	12MB
Jumbo Frame	12KBytes
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
IPv4 Layer 3 Functions	

IP Routing Protocol	Static route RIPv1/v2 OSPFv2
Layer 3 Protocol	ARP ARP Proxy IGMP Proxy
IPv6 Layer 3 Functions	
Other	ICMPv6,ND,DNSv6
Layer 2 Functions	
Port Configuration	Port disable/enable Flow control disable/enable Bandwidth control on each port Port loopback detect
Port Status	Display each port's speed duplex mode, link status, flow control status and autonegotiation status
VLAN	802.1Q tagged VLAN, up to 4K VLAN groups 802.1ad Q-in-Q (VLAN stacking) GVRP for VLAN management Private VLAN Edge (PVE) supportedProtocol- based VLAN MAC-based VLAN IP subnet VLAN
Bandwidth Control	TX/RX/Both
Link Aggregation	IEEE 802.3ad LACP/static trunk Supports 64 groups with 8 ports per trunk group
QoS	8 priority queues on all switch ports Supports strict priority and Weighted Round Robin (WRR) CoS policiesTraffic classification: - IEEE 802.1p CoS/ToS - IPv4/IPv6 DSCP - Port-based WRR
Multicast	IPv4 IGMP v1/v2/v3 snooping IPv4 Querier mode support IPv6 MLD v1/v2 snooping Multicast VLAN Register (MVR) Up to 1024
Security Functions	
Access Control List	Supports Standard and Expanded ACLIP- based ACL/MAC-based ACL Time-based ACL Up to 2K entries

Security	Port isolation Supports IP + MAC + port binding Identification and filtering of L2/L3/L4 based ACL Defend against DOS or TCP attacks Suppression of broadcast, multicast and unknown unicast packet DHCP Snooping, DHCP Option 82/43/60/61/67 Command line authority control based on user levels
AAA	TACACS+ and IPv4/IPv6 over RADIUS
Authentication	IEEE 802.1x port-based network access control
Switch Management Functions	
System Configuration	Console, Telnet, Web browser, SNMP v1, v2c
Secure Management Interfaces	SSHv2, TLSv1.2, SNMPv3
Management	IPv4 and IPv6 dual stack management User IP security inspection for IPv4/IPv6 SNMPSNMP v1, v2c and v3 SNMP MIB and TRAP SNMP RMON 1, 2, 3, 9 four groups IPv4/IPv6 FTP/TFTP IPv4/IPv6 NTP RADIUS authentication for IPv4/IPv6 Telnet user name and passwordIPv4/IPv6 SSH The right configuration for users to adopt RADIUS server's shell managementCLI, console, Telnet Security IP safety net management function: avoid unlawful landing at nonrestrictivearea Syslog server for IPv4 and IPv6 TACACS+ PLANET Smart Discovery Utility

SNMP MIBs	RFC 1213 MIB-II RFC 1215 Internet Engineering Task ForceRFC 1271 RMON RFC 1354 IP-Forwarding MIBRFC 1493 Bridge MIB RFC 1643 Ether-like MIBRFC 1907 SNMP v2 RFC 2011 IP/ICMP MIB RFC 2012 TCP MIB RFC 2013 UDP MIB RFC 2096 IP forward MIBRFC 2233 if MIB RFC 2452 TCP6 MIB RFC 2454 UDP6 MIB RFC 2465 IPv6 MIB RFC 2466 ICMP6 MIB RFC 2573 SNMP v3 notifyRFC 2574 SNMP v3 vacm RFC 2674 Bridge MIB Extensions (IEEE 802.1Q MIB) RFC 2674 Bridge MIB Extensions (IEEE 802.1P MIB)
Standard Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX
	IEEE 802.3z Gigabit 1000BASE- SX/LX IEEE 802.3ab Gigabit 1000BASE-T IEEE 802.3ae 10Gb/s Ethernet IEEE 802.3x flow control and back pressure IEEE 802.3ad port trunk with LACP IEEE 802.1ag CFM 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 IEEE 802.1Q VLAN tagging IEEE 802.1X port authentication network control IEEE 802.1ab LLDP RFC 768 UDP

	RFC 783 TFTP RFC 793 TCP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1112 IGMP v1 RFC 2236 IGMP v2 RFC 3376 IGMP v3 RFC 2710 MLD v1 RFC 3810 MLD v2 RFC 2328 OSPF v2 RFC 1058 RIP v1 RFC 2453 RIP v2 ITU-T G.8032 ERPS Ring
Environment	
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 90% (non-condensing)
Storage	Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 90% (non-condensing)

PHYSICAL SPECIFICATIONS :-

- **Dimensions:**

  440 x 207 x 44 mm (W x D x H), 1U height

- **Weight:**

  2.74kg

ENVIRONMENTAL SPECIFICATIONS

Operating:

Temperature: 0°C ~ 50 degrees C

Relative Humidity: 10% ~ 90% (non-condensing)

Storage:

Temperature: -20°C ~ 70 degrees C

Relative Humidity: 5% ~ 95% (non-condensing)

ELECTRICAL SPECIFICATION

Input Voltage:	100~240V AC, 50/60Hz, 1A (max.)		
Power Consumption (System on):	220V	7.4watts	25.2BTU
Power Consumption (Full Loading):	220V	23.2 watts	79.1BTU

PACKING INFORMATION

Box Dimensions (W x D x H):	475 x 285 x 80 mm
Gross Weight:	3.5kg
Carton Dimensions (W x D x H):	493 x 344 x 303 mm
Total Carton Weight:	14.8kg
Quantity:	4pcs in one carton

Zekko Tech Private Limited, Turbhe Industrial Park, Unit No. : 122 , Plot No. : C-56/1, TTC Industrial Area
Pawane, Turbhe MIDC, Navi Mumbai - 400 705, Maharashtra, India. Tel No. +91 9136007767