

### **IK-J028E**

## 28 Port 10G Uplink 24 Port Gigabit Managed Ethernet Switch

### [ Product Description ]

28-port 10 Gigabit uplink 24-port Gigabit managed Ethernet switch. Support 24 \* 10/100/1000 adaptive electrical ports, 4 \* 10 Gb SFP+ ports, 1 console port, and 1 USB serial port. Perfect security control strategy and CPU protect policy improve fault tolerance and ensure stable operation of the network and load balancing of the interconnection; The device supports automatic DoS attack defense and SNMP, IEEE 802.1, STP, RSTP, Link aggregation, and other functions. Advanced security functions and advanced quality of service (QoS), can be used as core layer, distribution layer or access layer switch with high density port, switch stacking and easy management, are ideal for various commercial network applications.

#### [Features]

- Support IEEE 802.1d、IEEE 802.1w、IEEE 802.1s、IEEE 802.1p、IEEE 802.3、IEEE 802.3u、IEEE 802.3x、IEEE 802.3z、
  IEEE 802.3ab、IEEE 802.3ae standards;
- L3 management, support DHCP Server, QoS, ACL, SNMP V1/V2/V3, IGMP Snooping v1/v2;
- Support STP/RSTP/MSTP (ERPS), Support loop detection and self-healing, support remote loopback monitoring and control (802.3ah OAM); Support IPV4/IPV6,RIP,OSPF
- Support multiple VLAN division, MAC VLAN, Protocol VLAN, Private VLAN;
- Support IP address + MAC address + VLAN+Port binding, DHCP Snooping, support IP source and DAI protection;

#### **Application Environment**

- Metropolitan area fiber broadband network: telecommunications, cable TV, network system integration, etc., network operators.
- > Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
- > Multimedia transmission: image, voice, data integrated transmission, suitable for remote teaching, conference TV, videophone and other applications.
- Real-time monitoring: simultaneous transmission of real-time control signals, images, data

### **Technical parameters**

Input/output Port	
Model	IK-J7028E
AC INPUT	AC100-240V , 50/60Hz



Ethernet Port	24 * 10/100/1000Mbps RJ45 Port 4 * 10G SFP Port 1 * RJ45 Console Port 1 * USB Port
Performance	
Bandwidth	128Gbps
Packet Buffer Memory	95.23Mpps
DDR SDRAM	128MB
Flash Memory	16MB
Package cache	12Mbit
MAC Address	16K
Jumbo frame	12Kbytes
VLANs	4096
MTBF	100000 hour
Standard	
Network Protocols	IEEE 802.3 : Ethernet MAC Protocol IEEE 802.3i : 10BASE-T Ethernet IEEE 802.3u : 100BASE-TX Fast Ethernet IEEE 802.3ab : 1000BASE-T Gigabit Ethernet IEEE 802.3z : 1000BASE-X Gigabit Ethernet (optical fiber) IEEE 802.3ac : 10G Ethernet (optical fiber) IEEE 802.3az : Energy Efficient Ethernet IEEE 802.3ad : Standard method for performing link aggregation IEEE 802.3x : Flow control IEEE 802.1ab : LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1p : LAN Layer QoS/CoS Protocol Traffic Prioritization(Multicast filtering function) IEEE 802.1q : VLAN Bridge Operation IEEE 802.1x : Client/Server Access Control and Authentication Protocol IEEE 802.1s : MSTP IEEE 802.1w : RSTP
Industry Standard	EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD)、EN61000-4-4 (EFT)、EN61000-4-5 (Surge)
Network Media	10BASE-T: Cat3、4、5 or above UTP(≤100 M)  100BASE-TX: Cat5 or above UTP(≤100 M)  1000BASE-TX: Cat5 or above UTP(≤100 M)  Multi-mode Fiber: 50/125、62.5/125、100/140um



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	Single-mode Fiber: 8/125、 8.7/125、 9/125、 10/125um
Certification	
Safety Certificate	CE、FCC、RoHS
Environmental standard	ds
Working Environment	Operating temperature: -10~50° C Storage temperature: -40~85° C Operating Humidity: 10%~90%, No condensation Storage Humidity: 5%~90%, No condensation Working height: Up to 10,000 feet Storage height: Up to 10,000 feet
Function indication	
PWR(Power indicator)	Lighting: Powered, Un-Light: No Power
SYS(System lights)	Lighting: System is normal, Flashing: system startup
Link(Link light)	Lighting: Connecting , Un-Light: Disconnect
Act(data light)	Flashing: Data Transmit, Un-Light: Disconnect
Physical specifications	
Product Information	Product Dimensions: 440*205*44mm Package Dimensions: 500*290*85mm Product N.W: 2.53KG Product G.W: 3.14KG
Packing Information	Carton Dimensions: 520*445*300mm Packing Qantity: 5 PCS Packing weight: 16.7KG
Voltage	Input Voltage: AC100-240V/50-60Hz Power supply: 12V3A
Packing list	Ethernet switch 1 Set , Instruction manual 1 PCS , Certificate 1 PCS , Power cord 1PCS Serial cable 1PCS , Rack ear: 1 Pairs
Order Information	
ZX-SWTG3424S	28 Port 10G Uplink 24 Port Gigabit Managed Ethernet Switch

# [Software function]

Basic function	Support hardware watchdog, factory reset, system and port LED
	Support global information, statistical information, log information
	Support User management, alarm management, configuration management
	Support Port rate, duplex, flow control, maximum frame length configuration



Support Port mirroring, port speed limit, port energy saving  Support Layer 3 Interface  Support Layer 3 Interface  Support PV4, IPV6 address configuration  Support ND configuration  Support IPV6 static routing  Support IPV6 Static routing  Support DMCP  Support DMCP Server  Support DMCP server  Support DMCP server  Support DMCP snooping  Support AK VLAN  Support SULAN , baesd on port VLAN  Support SULAN , iP VLAN  Support Suland Sula		
Layer 3 Interface  Support IPv4, IPv6 address configuration  Support ARP configuration  Support ND configuration  Support IPv4 static routing  Support IPv6 static routing  Support OSPF  Support DHCP Server  Support DHCP Server  Support DHCP Snooping  Support AK VLAN  Support AK VLAN  Support AK VLAN  Support South Support AK VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN \ IP VLAN  Support MAC NADD Support MAC Address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BO2.1X Certification  Support ARD LUX Certification  Support AAC (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support Port mirroring, port speed limit, port energy saving
Layer 3 Interface  Support ARP configuration  Support IPv4 static routing  Support IPv4 static routing  Support RIP V1/V2  Support OSPF  DHCP  Support DHCP server  Support HDCP Snooping  Support 4K VLAN  Support 4K VLAN  Support 802.1Q VLAN , based on port VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC VLAN , IP VLAN  Support Static, dynamic, filtered address table  Password protection  Support HTTPs, SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BU-PAAC -PORT-VLAN binding  Support BU-PAAC -PORT-VLAN binding  Support BU-PAAC -PORT-VLAN binding  Support BU-PAAC -PORT-VLAN binding  Support BU-PAC-PORT-VLAN binding  Sup	Layer 3 Interface	Support Layer 3 interface
Support ARP configuration  Support ND configuration  Support IPv4 static routing  Support IPv4 static routing  Support OSPF  Support OSPF  Support DHCP server  Support DHCP relay  Support DHCP Sonoping  Support 4K VLAN  Support 802.1Q VLAN , based on port VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support Voice VLAN  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS. SSH V1/V2  Support PMAC-PORT-VLAN binding  Support DHCP Snooping. DHCP Attack protection  Support Buport ARP detection, IP source protection, DoS protection  Support DHCP Snooping. DHCP Attack protection  Support Buport ARP detection, Authorization, Accounting), Support RADIUS protocal,TACACS+		Support IPv4, IPv6 address configuration
Layer 3 Routing  Support IPv4 static routing  Support RIP V1/V2  Support OSPF  Support DHCP server  DHCP  Support DHCP server  Support AK VLAN  Support AK VLAN  Support 802.1Q VLAN , based on port VLAN  Support AKC VLAN , based on port VLAN  Support MAC VLAN , iP VLAN  Support MAC VLAN . IP VLAN  Support Voice VLAN  Support Voice VLAN  Support Satic, dynamic, filtered address table  Password protection  Support BEstrict user access based on port number, IP address, MAC address  Support IP-MAC-PORT-VLAN binding  Security features  Support ARP detection, IP source protection, DoS protection  Support 802.1X Certification  Support RADIUS protocal, TACACS+		Support ARP configuration
Layer 3 Routing  Support IPv6 static routing  Support RIP V1/V2  Support OSPF  Support DHCP server  Support DHCP Support DHCP Server  Support DHCP Snooping  Support 4K VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support 802.1Q VLAN registration protocol)  Support Voice VLAN  Support Voice VLAN  Support Voice VLAN  Support Satic, dynamic, filtered address table  Password protection  Support Bestrict user access based on port number, IP address, MAC address  Support IP-MAC-PORT-VLAN binding  Security features  Support ARP detection, IP source protection, Dos protection  Support 802.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support ND configuration
Support RIP V1/V2 Support DHCP server  Support DHCP relay Support DHCP Snooping  Support 302.1Q VLAN , baesd on port VLAN Support Support SVLAN Support GVRP (VLAN registration protocol) Support MAC VLAN , IP VLAN Support MAC VLAN , IP VLAN Support MAC address automatic learning and aging Support Static, dynamic, filtered address table  Password protection Support Restrict user access based on port number, IP address, MAC address Support IP-MAC-PORT-VLAN binding Security features  Support ARP detection, IP source protection, DoS protection Support BO2.1X Certification Support RADIUS protocal, TACACS+		Support IPv4 static routing
Support DHCP server  Support DHCP server  Support DHCP relay  Support DHCP Snooping  Support Ak VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support Access, Trunk, Hybrid VLAN mode  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS, SSH V1/V2  Support IFTPAC-PORT-VLAN binding  Security features  Support BO2.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+	Lavar 2 Pavitina	Support IPv6 static routing
Support DHCP server  Support DHCP relay Support DHCP Snooping  Support 4K VLAN Support 802.1Q VLAN , baesd on port VLAN Support 802.1Q VLAN , baesd on port VLAN Support GVRP (VLAN registration protocol) Support MAC VLAN . IP VLAN Support Voice VLAN Support Voice VLAN Support Static, dynamic, filtered address table Password protection Support Restrict user access based on port number, IP address, MAC address Support IP-MAC-PORT-VLAN binding Security features Support ARP detection, IP source protection, DoS protection Support BO2.1X Certification Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+	Layer 3 Routing	Support RIP V1/V2
DHCP  Support DHCP relay  Support DHCP Snooping  Support 4K VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support IP-MAC-PORT-VLAN binding  Security features  Support BOHCP Snooping, DHCP Attack protection  Support 802.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support OSPF
Support DHCP Snooping  Support 4K VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support Voice VLAN  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS, SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Security features  Support ARP detection, IP source protection, DoS protection  Support 802.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support DHCP server
Support 4K VLAN  Support 802.1Q VLAN , baesd on port VLAN  Support BOZ.1Q VLAN , baesd on port VLAN  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS, SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BOZ.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+	DHCP	Support DHCP relay
Support 802.1Q VLAN , baesd on port VLAN  Support RVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support IP-MAC-PORT-VLAN binding  Support P-MAC-PORT-VLAN binding  Support BO2.1X Certification  Support 802.1X Certification  Support RADIUS protocal, TACACS+		Support DHCP Snooping
Support Access, Trunk, Hybrid VLAN mode  Support GVRP (VLAN registration protocol)  Support MAC VLAN , IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS, SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BO2.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support 4K VLAN
Support GVRP (VLAN registration protocol)  Support MAC VLAN 、 IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BO2.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support 802.1Q VLAN , baesd on port VLAN
Support GVRP (VLAN registration protocol)  Support MAC VLAN  IP VLAN  Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support BO2.1X Certification  Support 802.1X Certification, Authorization, Accounting), Support RADIUS protocal, TACACS+		SupportAccess、Trunk、Hybrid VLAN mode
Support Voice VLAN  Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  Support AAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+	VLAN	Support GVRP (VLAN registration protocol)
Support MAC address automatic learning and aging  Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  Support AAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support MAC VLAN 、 IP VLAN
Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  Support AAA (Authentication, Authorization, Accounting), Support RADIUS protocal,TACACS+		Support Voice VLAN
Support Static, dynamic, filtered address table  Password protection  Support Restrict user access based on port number, IP address, MAC address  Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal,TACACS+	NAAC Adduses	Support MAC address automatic learning and aging
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Support HTTPS、SSH V1/V2  Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+	Security features	Password protection
Support IP-MAC-PORT-VLAN binding  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support Restrict user access based on port number, IP address, MAC address
Security features  Support ARP detection, IP source protection, DoS protection  Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support HTTPS、SSH V1/V2
Support DHCP Snooping、DHCP Attack protection  Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support IP-MAC-PORT-VLAN binding
Support 802.1X Certification  SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support ARP detection, IP source protection, DoS protection
SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+		Support DHCP Snooping、DHCP Attack protection
		Support 802.1X Certification
Support Port security, port isolation		SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal, TACACS+
		Support Port security, port isolation



Access control	Support L2(Layer 2) ~ L4(Layer 4) Packet filtering function
	Support Port mirroring, flow rate limiting, QoS remarking
QOS	Support 8 port queues
	Support Port priority, 802.1P priority, DSCP priority
	Support SP, WRR Priority scheduling algorithm
	Support STP(IEEE 802.1d), RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) protocal
Spanning tree	Support Multi-instance, Support Aggregate interface
	Support BPDU protection
	Support IGMP v1/v2/v3 Snooping
	Support MLD v1/v2 Snooping
	Support Layer 2 multicast fast leave mechanism, querier
Multicast	Support Layer 2 IPv4 static multicast
	Support Layer 2 IPv6 static multicast
	Support IGMP v1/v2/v3 Layer 3 multicast
	Support multicast suppression
Storm suppression	Support broadcast storm suppression
	Support unknown unicast suppression
Ring protection	Support Ring protection
	Support Static Aggregation
	Support LACP Dynamic Aggregation
Link Aggregation	Support based on IP, MAC, mixed load-balancing modes
	Maximum support 32 aggregation groups (8 ports per aggregation group)
IPv6	Support IPv6 Ping、IPv6 Traceroute、IPv6 Telnet
	Support IPv6 SSH
	Support IPv6 HTTP 、 IPv6 HTTPS
	Support WEB Management (HTTP、HTTPS)
	Support CLI (Telnet, SSH V1/V2, Local serial port)
	Support SNMP V1/V2/V3
Management and	Support RMON V2



Maintenance	Support LLDP Device discovery
	Support SNTP Time synchronization
	Support CPU Monitoring, Memory Monitoring
	Support System log, classification warning
	Support Ping, Traceroute detection, cable detection

# [Product Picture]



# [Physical structure]



