

# **Simplify Your Daily Routine**

--ZXR10 2900E Series Easy-maintenance Secure Switch



### **Overview**

ZXR10 2900E series switches are the superior layer 2 switches presented by ZTE. With innovative "easy" concept incorporated in every detail, ZXR10 2900E series switches bring users ultimate efficiency, cutting down the maintenance costs of the network through simple yet efficient methods.

ZXR10 2900E provides enhanced layer 2 threat defense capabilities to mitigate network attacks. Multiple measures like bidirectional ACL, dynamic ARP inspection and MAC/IP/port automatic binding after 802.1X authentication help enterprise users better secure their networks.

ZXR10 2900E offers the following switch types: 2910E-PS, 2918E, 2918E-PS, 2928E, 2928E-PS and 2952E.

The interface combinations of these switches are listed below:

2910E-PS: 8\*FE RJ45 (POE/POE+) + 2\*GE Combo

2918E: 16\*FE RJ45 + 2\*GE Combo

2918E-PS: 16\*FE RJ45 (POE/POE+) + 2\*GE

Combo

2928E: 24\*FE RJ45 + 2\*GE Combo + 2\*GE

SFP

2928E-PS: 24\*FE RJ45 (POE/POE+) + 1\*expansion card slot (1\*4 FE SFP ports/ 1\*4 GE SFP ports/ 1\*4 GE RJ45 ports card available)

2952E: 48\*FE RJ45+4\*GE SFP



#### **Features**

The state-of-the-art ZXR10 2900E series switches fully support for all the leading L2 features and are suitable to be placed in enterprise networks and campus networks. ZXR10 2900E provides full service support, ease-of-maintenance experiences and highly secure and reliable networking methods to ensure sound network operation.

#### **Smart VLAN Support**



ZXR10 2900E series switches not only support 1:1 VLAN mapping, but also support N: 1 VLAN mapping. VLAN aggregation can thus be implemented at the access layer to increase the efficiency of VLAN utilization.

ZXR10 2900E also supports other VLAN features, including port-based VLAN, subnet VLAN, Protocol-based VLAN, QinQ and flexible selective QinQ. Enterprise network administrator can distinguish users and services effectively and apply different strategies thereafter.

ZXR10 2900E supports voice VLAN (which means the automatic assignment of dedicated VLAN and QoS strategy to voice equipment), thus enabling the voice traffic to enjoy high priority.

#### **Improve Video Bearing Capabilities**

Multicast-based technologies like video-surveillance and videoconference are becoming more and more popular these days. ZXR10 2900E fully supports L2 multicast, including IGMP snooping, Filtering, Proxy and Fastleave, MVR (Multicast VLAN Registration) to facilitate the deployment of these services.

ZXR10 2900E also supports administratively scoped multicast to implement refined control to multicast applications.

#### **IPv6 Features**

ZXR10 2900E supports IPv6 features, including Telnet v6, Ping V6, ND, MLD Snooping, IPV6 ACL and DHCP V6 Snooping to facilitate the deployment of these services.

#### **Easy-POE**

All the electrical access interfaces of ZXR10 2910E-PS, 2918E-PS and 2928E-PS support POE and POE+, which go in line with 802.3af and 802.3at standards, and are compatible with PD equipment that doesn't support 802.3af and 802.3at. For POE, the power output per single interface can reach 15.4W; For POE+, the power output per single interface can reach 30W. ZXR10 2900E supports assigning POE time-ranges and maximum POE output for specific interfaces. During the time when power output is unnecessary, the POE function can be turned off to save energy for the customer.

#### **Easy-Security**

ZXR10 2900E supports rich security related measures to ensure the customer can have a robust network.

With egress ACL, important access terminals can be protected with fewer configurations; users don't have to configure ingress ACL on each access interface.

After the user passes 802.1X authentication, the MAC/IP/port relationship can be automatically frozen, so that future MAC/IP spoofing attacks can be prevented.



With DAI (Dynamic ARP inspection) function and IP/MAC binding, the DOS attacks would be effectively restricted:

Traffic mirroring/analyzing functions like SPAN, RSPAN and sFlow help network administrator better understand network running status.

#### **Easy-Maintenance**

The innovative M-Button function enables the network administrator to fetch important equipment information including port/memory/CPU status in case of network problems, enabling instant trouble-shooting, and thus reducing OPEX to the utmost extent.

GVRP VLAN Registration Protocol can help network administrators reduce network configuration workload and easily deploy large amounts of VLANs in complicated networking environments. ZXR10 2900E series switches support the implementation, distribution, registration and transmission of VLAN attributes in dynamic GVRP pattern, which can simplify VLAN configuration management, and reduce network interconnection problems caused by inconsistent configuration.

ZXR10 2900E series switches support Zero Configuration, which means the switch can automatically download software images and configurations. Zero Configuration enables plug and play and drastically reduces maintenance cost.

#### Green

Following green and eco-friendly design philosophy, ZXR10 2900E helps the customers save energy and reduce power consumption from all the aspects of design:

No fan (2918E/2928E/2952E).

The product adopts the advanced chip technology, so the power consumption of the main chip is reduced up to 20%.

The materials used during the product life span of 2900E completely meet RoHS and WEEE standards.

## **Technical Specification**

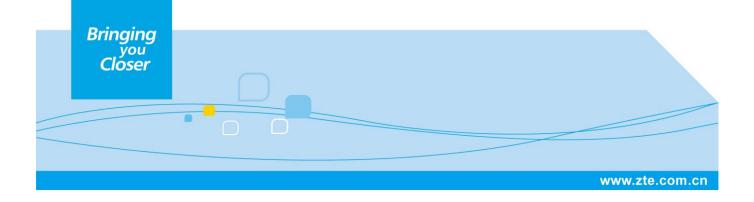


Functions and Parameters		2910E-PS	2918E	2918E-PS	2928E	2928E-PS	2952E		
Interfa ce Combi nation	Fixed interfaces	8 FE RJ45 ports (POE/POE+) +2 GE Combo ports	16 FE RJ45 ports+2 GE Combo ports	16 FE RJ45 ports (POE/POE+) +2 GE Combo ports	24 FE RJ45 ports+2 GE SFP ports+2 GE Combo ports	24 FE RJ45 ports (POE/POE+)	48 FE RJ45 ports+4 GE SFP ports		
	Expansion card(Num ber of expansion card slots*Type of expansion card)	-	-	-	-	1*4 FE SFP ports/1*4 GE SFP ports/1*4 GE RJ45 ports	-		
	Backplane Capacity	32Gbps							
Basic Param eters	Switching Capacity	5.6Gbps	7.2Gbps	7.2Gbps	12.8Gbps	12.8Gbps	17.6Gbps		
	Packet Forwardin g Rate	4.2Mpps	5.4Mpps	5.4Mpps	9.6Mpps	9.6Mpps	13.2Mpps		
	MAC table Depth	16K							
	L2 Features	IEEE 802.1q VLAN,IEEE 802.1p, IEEE 802.3ad, STP, RSTP, MSTP, Selective QinQ, VLAN translation, PVLAN, DHCP Snooping, 802.1x							
	L3 Features	Static Routing							
	IPv6	IPv6 Ping,IPv6 Telnet, ND(Neighbor Discovery), MLD Snooping, DHCPv6 Snooping, IPv6 ACL							
Featur es	Multicast	IGMP Snooping, Filtering, Proxy and Fast Leave, MVR, SGR (Static Group Register), UGAC (User Group Access Control), UGAR (User Group Access Record)							
	QOS	Marking, modification of Qos priority and mapping between 802.1p, IP DSCP. 8 hardware-based queues per port, SP, WRR, SP+WRR queue scheduling mechanisms, Policing/shaping based on port/flow, Tail-Drop							
	Security	CPU anti-attack, CPU overload protection, STP Root Guard, BPDU guard, ARP attack protection, IP source Guard, DAI, DHCP snooping, DHCP option82, Bidirectional ACL							
	Reliability	LACP, ZESS, ZESR/ZESR+							
	Enhanced Features	Bidirectiona I ACL, M- BUTTON, Zero- Configuratio n,	Bidirectional ACL, M- BUTTON, Zero- Configuratio n	Bidirectional ACL, M- BUTTON, Zero- Configuratio n,	Bidirectional ACL, M- BUTTON, Zero- Configuratio n	Bidirectional ACL, M- BUTTON, Zero- Configuratio n,	Bidirectiona I ACL, M- BUTTON, Zero- Configuratio n		



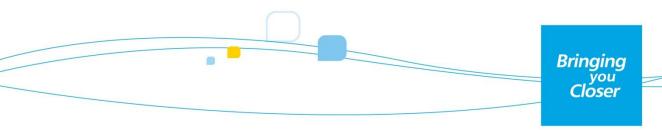
Functions and Parameters		2910E-PS	2918E	2918E-PS	2928E	2928E-PS	2952E	
- Tara		POE/POE+		POE/POE+		POE/POE+		
Equip ment Mana geme nt	Equipme nt Manage ment	RS232 Console (RJ45), 2928E-PS Supports Ethernet management port, CLI, Telnet, SSH, Local and Remote Authentication of User, Web management, SNMP, NetNumen U31, Cluster Management(ZGMP)						
Physic al Param eters	Dimension s (H*W*D)	43.6mm*34 0mm*220m m	43.6mm*44 2mm*220m m	43.6mm*44 2mm*220m m	43.6mm*44 2mm*220m m	43.6mm*44 2mm*440m m	43.6mm*44 2mm*280m m	
	Maximum Weight	3kg	2.8kg	3.8kg	3kg	6.4kg	3.4kg	
	DC power supply	-	-48V	-57V~- 48V( POE:- 57V~-48V, POE+ :- 57V~-53V)	-48V	-57V~- 48V( POE:- 57V~-48V, POE+:-57V~- 53V)	-48V	
	AC power supply	100V~240V, 50Hz~60Hz	100V~240V, 50Hz~60Hz	100V~240V, 50Hz~60Hz; 550W RPS Power Supply: AC Input :100V ~240V, DC Output :- 55V~-53V	100V~240V, 50Hz~60Hz	100V~240V, 50Hz~60Hz	100V~240V, 50Hz~60Hz	
	Maximum power consumpti on	306W (Among which system power 66W, POE power output 240W)	13W	AC:317W (System power 70.6W, POE power output246.4 W) DC:508W(Sy stem power28W, POE power output480 W) AC+RPS:568 W(RPS power output60W, System power28W, POE power	17.1W	831W (Among which system power 111W, POE power output720 W)	27.2W	





tions and ameters	2910E-PS	2918E	2918E-PS	2928E	2928E-PS	2952E	
			output480 W)				
Power redundanc y pattern	-	-	-	-	Two independen t and swappable power supply modules	-	
Heat dissipatio n pattern	Fan cooling	Cooling without Fan	Fan cooling	Cooling without Fan	Fan cooling	Cooling without Fan	
Heat dissipatio n	185 BTU/h	42 BTU/h	180 BTU/h	55 BTU/h	311 BTU/h	88 BTU/h	
Temperatu re, humidity	Working temperature: -5°C~+50°C, humidity: 10%~90%						
Working <3000 meters							
MTBF/MT > 100000 hours/ <30 minutes							





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