



Leading 5G Innovations

ZTE ZXR10 5250 Series Switch Data Sheet

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Product Overview

The ZXR10 5250 Series switch is 1RU height all Gigabit L2 switch for campus network access and 1000Mbps to the desktop scenarios. It provides up to 52 GE interfaces and various interfaces combinations. The ZXR10 5250 Series switch supports full IEEE 802.3af Power over Ethernet Plus (PoE) and IEEE 802.3at Power over Ethernet Plus (PoE+) to fulfill more enterprise access scenarios. With high-density Gigabit interfaces, built-in high speed ASIC forwarding chips, full security and reliability related features, the ZXR10 5250 Series switch fully satisfies the requirements of campus access. Meanwhile, zero-touch provisioning, IEEE 802.3az Energy Efficient Ethernet (EEE) make the network not only easy for maintenance but also low consumption.

The ZXR10 5250 Series switch offers following switch products:



5250-12TC



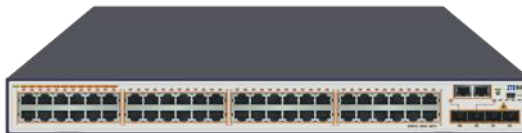
5250-12PC

5250-12TC: 8 Ethernet 10/100/1000M RJ45 electrical ports, 2 Ethernet 10/100/1000M RJ45 electrical ports and 2 GE SFP optical ports, fixed AC/DC power supply.

5250-12PC: 8 Ethernet 10/100/1000M RJ45 electrical ports (POE/POE+), 2 Ethernet 10/100/1000M RJ45 electrical ports and 2 GE SFP optical ports, fixed AC power supply.



5250-28TC



5250-52TC

5250-28TC: 24 Ethernet 10/100/1000M RJ45 electrical ports, 2 GE Combo ports and 2 GE SFP optical ports, fixed AC/DC power supply, RPS redundancy power supply.

5250-52TC: 48 Ethernet 10/100/1000M RJ45 electrical ports, 2 GE Combo ports and 2 GE SFP optical ports, fixed AC/DC power supply, RPS redundancy power supply.



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5250-28PC

5250-28PC: 24 Ethernet 10/100/1000M RJ45 electrical ports (POE/POE+), 2 GE Combo ports and 2 GE SFP optical ports, fixed AC/DC power supply, RPS redundancy power supply.

Product Features

● Smart VLAN Support

- The ZXR10 5250 Series switch not only supports 1:1 VLAN mapping, but also supports N: 1 VLAN mapping. VLAN aggregation thus can thus be implemented at the access layer to increase the efficiency of VLAN utilization.
- The ZXR10 5250 Series switch also supports QinQ and flexible selective QinQ. Network administrator can distinguish user and service effectively and apply different strategies thereafter.
- The ZXR10 5250 Series switch supports Voice VLAN, thus enabling the voice traffic to enjoy high priority.

● Powerful Service Bearing Capability

- By supporting rich L2 switching functions and low latency forwarding, the ZXR10 5250 Series switch can bear multi services including WLAN, Internet, Voice, Video and other data services.
- The ZXR10 5250 Series switch fully supports L2 multicast, including IGMP snooping, Filtering, Proxy and Fast leave, MVR (Multicast VLAN Registration) to facilitate the deployments of these services. With IPTV control implemented, operators can apply different CAC (channel access control) rules for users with channel packages.
- The ZXR10 5250 Series switch supports IPv6 features, including Telnet v6, Ping v6, ICMPv6, ND, MLD Snooping, IPv6 ACL and DHCP v6 Snooping to facilitate the deployment of these services.
- Support POE/POE+, which delivers customer more flexible service access choice.

● Flexible POE/POE+

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- Support POE and POE+ complying with the 802.3at and 802.3af standard to provide power supply for remote devices (including IP phones, WLAN APs, and network cameras) through twisted-pair cables.
- Support forcible power supply and could supply power for PD equipments that not compatible with 802.3af and 802.3at standards if needed.
- Support configuring the POE time range. During the time that doesn't need power supply, power supply can be stopped automatically to save energy.
- Support PD port power detection and negotiating POE power through LLDP-MED. If the actual power is greater than the PSE-distributed power, stops providing power supply and alarms will be generated and sent to the OAM centre.
- Support displaying the PSE power supply status and PD power supply status, such as whether power supply is provided, power, level, and temperature.

● **Enhanced Reliability, Multi-Dimensional Security**

- The ZXR10 5250 Series switch supports ZESR+ Ethernet ring protection and Ethernet smart ring protection function, which goes in line with RFC3619 and ITU.T G.8032 standard, which can recover the system from any link or node fault within 50ms.
- Support Smart Group and LACP (Link Aggregation Control Protocol), which can help guarantee the reliability of the link connection.
- Support various authentication methods such as 802.1x, Radius, TACACS+. Support CPU overload protection, anti-DDOS, deliver customer a security network.
- With technologies like DHCP snooping and IP source guard, user validity can be guaranteed; DAI (dynamic ARP inspection) function can help effectively mitigate the influence caused by ARP attacks.
- The ZXR10 5250 Series switch supports MFF (MAC forced forwarding), L2 separation and L3 inter-communication can be realized to keep the network safe.

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- For user management, the ZXR10 5250 Series switch not only supports normal username/password login method, but also supports encrypted login pattern including SSH, further eliminating the risk of username/password revelation.
- The ZXR10 5250 Series switch supports not only ingress ACL, but also egress ACL. User can implement incoming and outgoing traffic classification and speed restriction at the same time. This mechanism enables the customer to greatly simplify configuration and make more refined control in certain scenarios.
- The ZXR10 5250 Series switch supports SSL and can act as a SSL server.

● **Easy Maintenance**

- The innovative M-Button delivers instant trouble-shooting by reading indicators on front panel without login via terminal. It helps customer solve some common problems immediately.
- The ZXR10 5250 Series switch supports zero-configuration. When powered on, the equipment will automatically fetch its own software version and images.
- The ZXR10 5250 Series switch supports off-power alarming, which can help the operation staff make quick judgment and accelerate failure processing.
- The ZXR10 5250 Series switch supports multiple remote management patterns, including WEB management, telnet, SNMP, and a USB console interface.
- Two software image files can be stored for backup purpose.

● **Low OPEX, Green for More**

- Support IEEE 802.3az EEE (Energy Efficient Ethernet). Via chip-grade power management, interfaces and line card can automatically sleep when no traffic. In this way, electricity can be saved, and the power consumption of a single port can be reduced by 70%
- The fan speed can be automatically adjusted by 5 levels in accordance with the temperature inside the switch. It not only saves the power consumption, but also

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reduces the noise and extends the life cycle of fans.

- Complying with ROHS, WEEE and ISO14001 certification, No plumbum (Pb) in not only product materials but also the whole processing technic. Meanwhile, uses re-cycle degradable packing materials, practice green for more.

System Specification

Specification	5250- 12TC	5250- 12PC	5250- 28TC	5250- 52TC	5250- 28PC
GE Density	8 RJ45 +2 RJ45 +2 SFP	8 RJ45 (POE/POE+) +2 RJ45+2 SFP	24 RJ45+2 Combo+2 SFP	48 RJ45+2 Combo+2 SFP	24 RJ45 (POE/POE+)+2 Combo+2 SFP
POE	-	POE+ 30W POE 15.4W	-	-	POE+ 30W POE 15.4W
Switching Capacity (Gbps)	24	24	56	104	56
Packet Forwarding Rate(Mbps)	18	18	42	78	42
MAC Table Capacity	16K				
VLAN	4K				
Maximum Power Consumption (100% load with POE, W)	<14.6	<272.6 (POE:240W)	<27	<53	<760.9 (POE:720W)
AC Power Supply	100V~240V, 50Hz~60Hz				
DC Power Supply	-48V	-	-48V	-	-
Heat Dissipation Pattern	Fanless	Fan cooling			
Heat Dissipation	<37 BTU/h	<368 BTU/h	<78 BTU/h	<162 BTU/h	<931 BTU/h

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Specification	5250- 12TC	5250- 12PC	5250- 28TC	5250- 52TC	5250- 28PC
Environment Parameter	Working temperature: -5°C~+50°C, humidity: 20%~90%				
Dimensions (H*W*D, mm)	43.6*340*220		43.6*442*220		43.6*442*440
Weight (kg)	<2.8	<3.2	<2.9	<3.0	<6.5

Service Specification

Function	The ZXR10 5250 Series switch
L2 Features	Support IEEE 802.1p (COS), IEEE 802.1q (VLAN) Support IEEE 802.1d (STP)/ 802.1w (RSTP)/ 802.1s (MSTP) Support IEEE 802.3ad (LACP), Static Trunk Support IEEE 802.3z (1000Base-X) / 802.3ab (1000BaseT) Support IEEE 802.3ae (10Gbase) Support Voice VLAN Support QinQ, Selective QinQ Support PVLAN Support Port mirroring, Traffic mirroring Support GVRP Support LLDP
L3 Features	Support IPv4 Static routing Support DHCP Snooping, DHCP Relay, DHCP Option82 Support DHCPv6 Snooping, Option18, Option 37
Multicast	Support IGMPv1/v2/v3 snooping Support CAC (channel access control), MVR (Multicast VLAN Registration) Support MVR Support MLD Snooping
QoS	Support traffic classification based on Layer 2 headers, Layer 3 protocols, Layer 4 protocols, and 802.1p priority Support 8 hardware-based queues per port Support queue scheduling algorithms, such as SP, WRR, SP+WRR Support congestion avoidance mechanisms, such as WRED and tail drop

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Function	The ZXR10 5250 Series switch
	Support policing/shaping based on port
PoE	Support POE (IEEE 802.3 af) Support POE+ (IEEE 802.3 at)
Security	Support standard ACL, VLAN ACL, Link ACL, extended ACL, mixed ACL, IPv6 ACL Support time-range ACL configuration, Bidirectional ACL Support 802.1x authentication and 802.1x server Support MAC authentication Support AAA/ RADIUS and TACACS+ authentication for login users Support SSH Support CPU anti-attack Support STP Root Guard, BPDU guard Support URPF
Reliability	Support redundancy power supply Support LACP Support ZESR/ZESR+(ZTE Ethernet Switch Ring), ITU.T G.8032
Equipment Management	Support CLI, Telnet, SSH, Local and remote (Radius/Tacacs+) user authentication Support out-band management interface Support SNMP v1/v2/v3 Support Mirroring, RSPAN Support RMON Support WEB management Support NTP Support Syslog, Sflow Support Easy Manager zero-configuration and fast in-batch inspection tool Support Dying gasp power-off alarm
Enhanced Features	Support M-BUTTON Support Zero-touch deployment

Application Scenario

● Access in Carrier/Campus Network

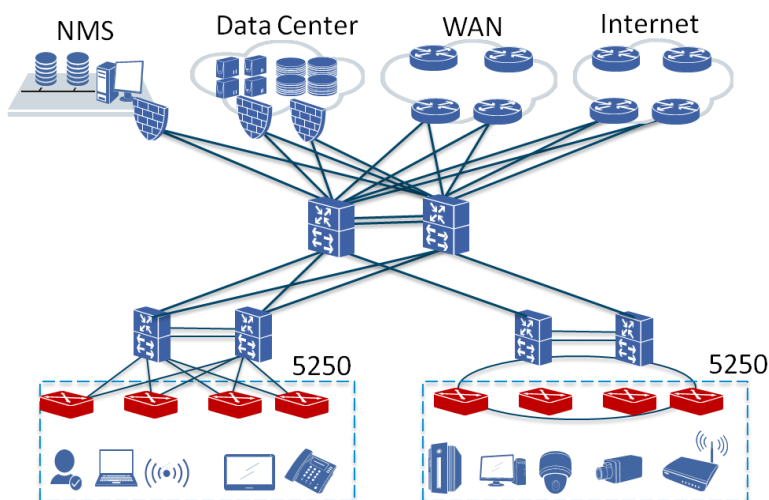
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The ZXR10 5250 Series switch supports various L2 features and POE/POE+, it can be applied in multiple scenarios including carrier/campus access and GE to desktop scenario. Below is an example of campus application as an aggregation switch.



Order Information

Mainframe

5250-12TC-AC	5250-12TC AC Base (Fixed AC Power Supply)
5250-12TC-DC	5250-12TC DC Base (Fixed DC Power Supply)
5250-12PC-AC	5250-12PC AC Base (Fixed AC Power Supply)
RS-5250-28TC-AC	5250-28TC AC Base (Fixed AC Power Supply with RPS Redundancy Power)
RS-5250-28TC-DC	5250-28TC DC Base (Fixed DC Power Supply with RPS Redundancy Power)
RS-5250-52TC-AC	5250-52TC AC Base (Fixed AC Power Supply with RPS Redundancy Power)
RS-5250-52TC-DC	5250-52TC DC Base (Fixed DC Power Supply with RPS Redundancy Power)
5250-28PC-AC	5250-28PC AC Base (Fixed AC Power Supply with RPS Redundancy Power)

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Redundancy Power Module

RS-SWPB-180W3-AC	Redundancy AC Power Module for 5250-TC
RS-SWPB-180W3-DC	Redundancy DC Power Module for 5250-TC

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