



AT-S2900-Series

Carrier-Level High Reliability Layer-3 Routing Functions aried Serv

Characteristics Verso IPv6 Solution Comple Security Mechanism

Supports Maximum 48
GE TX Ports and 410GE

Advanced Hardware
Architecture and
Industry-leading Port
Density

#### **Product Overview**

S2900 Series is a next-generation aggregation 10GE switchI government and enterprise networks, Internet café and diskless working environment. It is developed on the basis of high performance

own independent intellectual property rights. It supports functions such as powerful ACL, flexible QinQ, 1:1 or N:1 VLAN switching, Ethernet OAM, carrier-level QoS and industry-level 10GE Ether-ring, ensuring this switch series meets application requirements in all kinds of complicated sites. It also supports layer-3 routing protocol.

#### **Product Characteristics**

## Innovative Virtual Cluster Switching Technique

AT-S2900 Series virtualizes multiple physical devices into one. The performance, reliability and management of the virtual system are superior to the physical ones.

Improved Performance: makes full use of each link in the physical devices, which avoids STP blocking the link and protects the original link to the maximum extent.

High Reliability: Based on the advanced distribution mechanism and efficient cross-physical link aggregation link function, the logic control plane, service control plane and service data plane are separated. Thus, ATS S2900 Series can support continuous layer-3 routing forwarding, avoiding service interruption as a result of a single point of failure.

Easy Management: BVSS realizes single IP management, greatly improving the networking efficiency and lowering the operating cost.



ANDA Telecom Pvt. Ltd.

Registered office : E-36, Amar Colony, Lajpat Nagar-IV, New Delhi - 110024, INDIA Phone : +91 11 41323629, +91 93 5302 57173

E-mail: Info@andatelecomindia.com URL: www.andatelecomindia.com

#### **Product Characteristics**



## Industrial Ethernet Ring with Zero Delay and Zero Packet Loss

Supports industry-level EAPS and their protection shift time is less than 50ms. Their high reliability is represented by the null packet loss, which has been proved by many years of application in the Grid, rail transportation and defense systems.

#### Telecom-Level Ethernet Switch

Supports the telecom-level Ethernet-ring protection protocol with a protection shift time of less than 50ms, STP/RSTP/MSTP, backup of active and standby uplinks and LACP link aggregation to cater to the requirements of high reliability of carriers.

Provides the perfect Ethernet OAM mechanism to monitor the network running status in real time for rapid trouble locating and detection.

Supports powerful ACL functions to access and control L2-L7 data based on physical port, VLAN, MAC, IP and protocol port ID, and providing carriers flexible and various policy control methods.

Supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade.

Supports various L2 multicast functions, including IGMP-Snooping, fast-leave and trans-vlan multicast copy.

### Flexible and Convenient Management and Maintenance

Supports management modes such as the console port, Telnet, SSH, etc.

Supports the WEB management mode, which is easy and efficient so that it makes installation and debugging convenient.

Supports TFTP-patterned file upload/download management.

Supports ISSU (In-Service Software Upgrade).

Supports SNMP and smart network management platform to realize automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management

#### **QoS Policies**

Supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority to better streamline carrier's services.

Supports provides flexible bandwidth control policies and supports port-/flow-based flow limit, and ensuring the line speed forwarding of each port to make sure the high quality of video, audio and data services.

Supports 8 priority queues by each port.

Supports multiple queue schedule algorithms such as SP, WRR, or "P plus WRR"

#### Versatile IPv6 Solutions

Supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, etc.

Supports Ping, Traceroute, Telnet, SSH, ACL and so like on the basis of IPv6, meeting IPv6 networks' equipment management requirements and service control requirements.

#### Perfect Security Mechanisms

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP-related SYN flood, UDP flood, broadcast storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Supports perfect security authentication mechanisms: IEEE 802.1x, Radius and Tacacs+.

Supports storm/multicast/unicast limit to ensure the normal running of equipment in harsh network conditions.

Supports a perfect ring detection mechanism to ensure the long-term stable running of network.

Supports port isolation within the same VLAN, DHCP-Snooping, and IP plus MAC plus Port binding for ensuring user data security;

#### ANDA Telecom Pvt. Ltd.

Registered office: E-36, Amar Colony, Lajpat Nagar-IV, New Delhi - 110024, INDIA

Phone: +91 11 41323629, +91 93 5302 57173

E-mail: Info@andatelecomindia.com URL: www.andatelecomindia.com





# **AT-S2928E**



# -24 GE TX Ports -4 10 GE/GE SFP+ Ports



Registered office : E-36, Amar Colony, Lajpat Nagar-IV, New Delhi - 110024, INDIA

Phone: +91 11 41323629, +91 93 5302 57173

E-mail: Info@andatelecomindia.com URL: www.andatelecomindia.com



# Product Specifications Features

em		AT-S <b>2928E</b>
Interface		24 GE TX 4 10GE/GE SFP+
Console(RJ45)		1
Backplane(Gbps)		128
Forwarding rate(Mpps)		96
Chassis	Dimensions (WxDxH)(mm)	440x180x44
	Weight(KG)(empty)	2.6
Package	Dimensions (WxDxH)(mm)	500x320x80
	Weight(KG)	3.9
Power consump	no-load	< 22W
	full-load	35W
Power su	oply AC: 100V-240V, 50Hz±10%	45W
Total output BTU (1000BTU/H=293W)		153.58
Fan number		1
Noise@25°C(dBA)		0
MTBF(H)		> 50,000
Forwarding mode		Store-forward
Flash (MB)		32
DRAM (MB)		256
MAC		16K
Buffer size(MB)		1.5
Jumbo frame		9K

#### VLAN

 4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice-VLAN

#### **Spanning Tree**

- 802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
- BPDU guard, root guard and loopback guard

#### Multicast

IGMP v1/v2/v3, IGMP Snooping,
 IGMP Fast Leave, MVR, IGMP filter

#### IP

- · Static route, RIP, OSPF
- IPv4/v6 dual stack

#### IPv6

- ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD v1/2, MLD snooping

#### Certification

· CE, FCC, ROHS

#### QoS

CAR, HQoS, MAC/IP/TCP/UDP/
 VLAN/ COS/ DSCP/ TOS based
 QoS, 802.1P/ DSCP priority relabeling, SP, WRR, and "SP+WRR",
 Tail-Drop, WRED, flow monitoring

#### Security

and traffic shaping

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky DAI & IP source guard, PPPoE+,
- IEEE 802.1x, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and filtrationAnti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc. Broadcast/multicast/unknown unicast storm-control
- MD5, SHA-256, RSA-1024, AES256, etc.

#### DHCP

- DHCP server/relay/client
- DHCP snooping/option82

#### ANDA Telecom Pvt. Ltd.

Registered office : E-36, Amar Coiony, Laipat Nagar-IV, New Delhi - 110024, INDIA Phone : +91 11 41323629, +91 93 530 2 57173 E-mail : Info@andatelecomindia.com URL : www.andatelecomindia.com

#### Reliability

- Static/LACP link aggregation, Interface backup
- EAPS and ERPS
- · ISSU uninterrupted system upgrade
- · BVSS, ups to 16-units per stock
- VRRP
- UDLD

#### Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP
- · ZTP
- SPAN, RSPAN
- Dying gasp\*

#### **Environment**

- Operating temperature/humidity: 0°C -50°C ,10%-90% non-condensing
- Storage temperature/humidity:
   -20°C -70°C, 5%-95% non-condensing

#### Accessories

 Power cord, rackmount kits, console cable