



## SNR-S2940 Fast Ethernet Intelligent Access Switch Datasheet

## SNR-S2940-8G



## SNR-S2940-8G-PoE



## SNR-S2940-8G-v2



### Product Overview

SNR-S2940 series is Fast Ethernet intelligent security access switch for carrier and MAN networks. It supports comprehensive QoS, classified bandwidth control, multi link aggregation, intelligent security control, which fulfill the network requirements for carrier network, MAN security access, and so on.

SNR-S2940 series designed for ipv4 and ipv6 dual stack network. With the abundant ipv6 features, the product can still work for next generation network.

### Key Features and Benefits

#### ► High Adaptability VLAN Features

SNR-S2940 series switch supports 802.1q and port based VLAN, as well as MAC based VLAN. When user move from one port to another, system can still record it as the same user through identified MAC and then keep the same VLAN for the user.

SNR-S2940-8G-v2 QinQ technique provide low cost, easy operation, manageable L2 VPN function, and differentiate data packets by its service and area to support more and more business.

The advantages are: most small broadcast domain, with high efficiency; separate data between users on L2 with high security; unique VLAN for each user to identify the user; and VLAN for each user improves the management and operation level.

Voice Vlan function enables to add IP Phone to voice VLAN to ensure effective QoS.

SNR-S2940 supports Secure Shell(SSH), which will ensure the security of switch management and configuration. SNR-S2940 can be managed by general network management platform with 3rd management software.

#### ► PoE support

The SNR-S2940-8G-PoE support PoE (Power Over Ethernet) technical and connect to wireless AP, IP phone and Network Camera. The network can help admin easy deployed of cable. SNR-S2940-8G-PoE can support 8 ports POE at same time and the MAX power of each port upto 15.4W with 802.3af support. The product can define the power of each port to save the power and set port priority for each port.

#### ► High Reliability

SNR-S2940 series supports Combo Gigabit uplink ports, which could be designed in various ring protection applications, effectively raised the expansibility and performance of network

SNR-S2940 series supports VCT & DDM(Digital Diagnostic Monitoring), help to locate the error places in the link, make it fast to solve relative problems for network management

SNR-S2940 series supports STP, RSTP, MSTP based on 802.1D, 802.1W, 802.1S, to avoid loop link and configure abundant backup link in network. 802.3ad port aggregation is supported to add link bandwidth and abundant connection between equipments

With Lightning Protection, SNR-S2940 could ensure the network stability in physical aspect.

#### ► Enhanced Security

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based RADIUS server.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets and forward by different policies.

The SNR-S2940 series supports DHCP snooping, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrust ports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently

The SNR-S2940 product support much more L2 security features such as ARP guard, Anti-ARP scanning, and other ARP and MAC security technology to protect network security and reliability.

#### ► Comprehensive QoS

SNR-S2940 switch can classify stream by port, 802.1p, TOS, DSCP, and assign different level of service, supports SWRR/WRR/SP to provide QOS for voice/data/video.

#### ► Abundant Multicast Features

SNR-S2940 series also supports MVR(Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons. With MVR Trunk function, which could associate multicast VLAN to trunk port, SNR-S2940 combines the VLAN data into the same link, saving lots of resources for users.

The SNR-S2940 series could prevent multicast traffic from flooding through IGMP Snooping, while multicast traffic is forwarded to ports associated to multicast devices only with 3rd management software.

#### ► Simple Management

SNR-S2940 supports Simple Network Management Protocol (SNMP), in-band and out-of-band. Supports Command Line Interface(CLI) and WEB, supports Security IP function to prevent illegal users log in or change the configuration.

As an important feature of carrier network, OAM can help the user to monitor and manage the network across different protocols and equipments.

The SNR-S2940 switch also supports DHCPv6, based on IPv6, including DHCPv6 server, client, relay and snooping, etc.

#### ► Abundant IPv6 Support

The SNR-S2940 series switch supports IPv6 in hardware for maximum performance. As more network devices growing and the need for larger addressing and higher security become critical, the SNR-S2940 switch will be a right product to meet the requirement.

**Specification**

Item	SNR-S2940-8G	SNR-S2940-8G-PoE	SNR-S2940-8G-v2
Ports	8*10/100Base-TX + 1*Gigabit Combo(SFP/GT)	8*10/100Base-TX + 1*Gigabit Combo(SFP/GT)	8*10/100Base-TX + 2*Gigabits Combo(SFP/GT)
<b>Performance</b>			
Switching Capability	3,6Gbps	3,6Gbps	5,6Gbps
Forwarding Rate	2,7Mpps	2,7Mpps	4,2Mpps
MAC Address	8K	8K	8K
VLAN Table	4K	4K	4K
ACL TABLE	512	512	1K
Port Queues	4	4	4
<b>Physical</b>			
Dimension(WHD)	282mm x 44mm x 178mm	443mm x 44mm x 230mm	282mm x 44mm x 178mm
Relative Humidity	5% ~ 95%, non-condensing	5% ~ 95%, non-condensing	5% ~ 95%, non-condensing
Power Input	AC: 100V~240V	AC: 100V~240V	AC: 100V~240V
Operating Temperature	0°C ~ 50°C	0°C ~ 50°C	0°C ~ 50°C
Storage Temperature	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C
Power Consumption	≤15W	≤140W	≤15W
MTBF	>80,000 hours	>80,000 hours	>80,000 hours
EMC safety	FCC, CE, RoHS	FCC, CE, RoHS	FCC, CE, RoHS
<b>Features</b>			
Forwarding Mode	Storage and Forwarding		Storage and Forwarding
L1, L2 Features	VLAN Type	802.1Q based VLAN Port Based VLAN Support GVRP	802.1Q based VLAN Support QinQ, Selective QinQ, Flexibe QinQ Support Voice VLAN Port Based VLAN MAC Based VLAN Protocol Based VLAN Private VLAN Support GVRP
	Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP Support Root Guard, BPDU Guard, BPDU Forwarding	
	Link Aggregation	Support LACP 802.3ad, max 14 groups trunk with max 8 ports for each trunk, Support Source / Destination MAC/IP based load balance	
	MAC Operation	Support MAC Binding Support MAC Filter Support MAC Limit per port	
	Storm Control	Support Broadcast / Multicast / Unicast Storm Control Supports control and can set rate for broadcast	
	Port	Support VCT & DDM Support UDLD, LLDP, LLDP-MED Support 1:1 and N:1 port mirror Jumbo Frame 2048 bytes Loopback Interface Port Loop Detection Bandwidth Control: At least 64Kbps step Support HOL preventing first packet jam, semi-duplex backpressure, duplex IEEE802.3x GE combo ports could be compatible with FE SFP module Port Protection	
	Fast Ring	MRPP(Multi-Layer Ring Protection Protocol), compatible with EAPS	
PoE+(PoE switch only)	Support IEEE 802.3af PoE Support global / port PoE function control		
QoS Features	Traffic Classification based on IEEE 802.1p CoS, DSCP, ToS Supports SP, WRR, SWRR for scheduling		Traffic Classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List Supports SP, WRR, SWRR for scheduling Support Flow Shaping

Security	IEEE 802.1x	Port, MAC Based Authentication Support Guest VLAN and Auto VLAN
	AAA	RADIUS for IPv4 and IPv6 TACACS+ for IPv4
	ACL	Support source/destination IP address, source/destination MAC address, IP type, TCP/UDP port number, IP precedence, time range, ToS. ACL on VLAN interface
	Enhanced	IP Source Guard support L3 Forwarding Block Support DHCP Snooping Prevent illegal multicast source and limited multicast.
Multicast		IGMP v1/v2/v3 snooping Multicast VLAN Register (MVR) Source / Destination Control Illegal multicast source detect IGMP Authentication IGMP Fast Leave
IPv6		ICMPv6, NDP, SNMP over IPv6, HTTP over IPv6, IPv6Ping/Tracer, IPv6Telnet, IPv6RADIUS+, IPv6Syslog, IPv6 SNMP, IPv6 FTP/TFTP
		Support DHCPv6 Server, Relay, Snooping
Switch Management		CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6 RMON 1,2,3,9 SSHv1,v2 & SSL support Public & Private MIB interface SNTP/NTP, Summer Saving Time Multiple sys-log servers OAM 802.3ah, 802.1ag NMS software management MAX Cluster IPv4 and IPv6 Security IP management BOOTP, DHCP Server/Client for IP address assignment
Firmware & Configuration		Multiple Configuration Files Firmware Upgrade via TFTP/FTP server Configuration file upload/download via TFTP/FTP server
DHCP		DHCP Relay, DHCP Relay Option 82, DHCP Snooping, and DHCP Snooping Option 82

### Ordering Information

Product	Description
SNR-S2940-8G	8 * 10/100M ports + 1 Gigabit Combo (SFP/GT) port.,AC power
SNR-S2940-8G-PoE	8*10/100Base-TX ports POE + 1 Gigabit Combo(SFP/GT) port
SNR-S2940-8G-v2	8 * 10/100M ports + 2 Gigabit Combo (SFP/GT) ports.,AC power

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