



SNR-S2965 Series Intelligent Switch Datasheet

Product Overview

SNR-S2965 Series is L2 Gigabits intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (VLAN VPN, Voice VLAN, QinQ, N:1 VLAN Translation etc), Ethernet Ring Protection Protocol (G.8032), classified bandwidth control, intelligent security control, OAM (Operations, Administration and Maintenance), manageability functions and Triple-Play services which fulfill the network requirements demanded by carrier network, MAN access. SNR-S2965 Series switch offers green features like IEEE 802.3az (Energy Efficient Ethernet), Fan-less design and Smart Fan feature, which can dramatically lower power consumption, achieve green energy and save the cost for the carrier and MAN users.

SNR-S2965 Series has 3 types including SNR-S2965-8T, SNR-S2965-24T and SNR-S2965-48T. Equipped with the FE and GE ports, the series integrates advanced management and security functions to provide performance and scalability.

Key Features and Benefits

► Green Energy

SNR-S2965 series complies with IEEE 802.3az (Energy Efficient Ethernet Energy-Efficient Ethernet) standard, dramatically lower power consumption

With Innovative port-LED Shut-off function, the user can automatically set the switch port-LED UP or DOWN at a specified time period according to their needs to achieve functional, energy-saving correct results.

► Simple and Flexible Operation and Maintenance

Full Ethernet OAM technology (IEEE802.3ah), VCT, DDM (Digital Diagnostic Monitoring) and other features achieve rapid detection of the network failures; reduce operation and maintenance difficulty.

► High adaptability VLAN Features

SNR-S2965 series supports 802.1Q and port based VLAN as well as MAC based VLAN, Voice VLAN and Protocol VLAN.

Abundant QinQ technology including Normal QinQ, Selective QinQ, and Flexible QinQ, gives users maximum freedom to configure QinQ policy.

N:1 VLAN Translation feature can translate multiple VLAN tags in the frames from access ports into one specified VLAN Tag. It provides a strong technical support for QoS policy convergence.

► Enhanced Security

SNR-S2965 series provide a variety of security mechanisms like SYN Flood, Land, ICMP Flood attack prevention and other DOS class technology, BPDU Guard and Root Guard which avoid accidental topology loops and prevent illegal edge devices become root to cause unnecessary flapping.

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. User-defined ACL provides more flexible access control for users.

SNR-S2965 series support 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.

SNR-S2965 series 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.

► High Reliability

SNR-S2965 series supports 4(2) Gigabit uplink ports, which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of network.

G.8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. SNR-S2965 series supports G.8032 v2 and can be deployed in a variety of complex network topologies including single ring, tangent ring, intersecting rings, double rings and other home networking.

Built-in 4K lightning protection for ports on SNR-S2965 series effectively resists lightning, reduces equipment damage significantly.

► Abundant Multicast Features

SNR-S2965 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-S2965 series combines the VLAN data into the same link, saving lots of resources for users.

SNR-S2965 series could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated to multicast devices.

Specification

Item	SNR-S2965-8T	SNR-S2965-24T	SNR-S2965-48T
Ports	6x10/100/Base-TX 2 x 10/100/1000Base-T 2 x 100/1000BaseX (SFP) ports	20x10/100/Base-TX 4 x 10/100/1000Base-T 4 x 100/1000BaseX (SFP) ports	44x10/100/Base-TX 4 x 10/100/1000Base-T 4 x 100/1000BaseX (SFP) ports
Performance			
Switching Capability	9,2Gbps	20Gbps	24,8Gbps
Forwarding Rate	6,84Mpps	14,88Mpps	18,44Mpps
MAC Address	8K	16K	16K
VLAN Table	4K	4K	4K
Jumbo Frame	10K	12K	12K
ACL TABLE	1408	2048	2048
Port Queues	8	8	8

Physical			
Dimension(WHD)	330mm x 44mm x 230mm	440mm x 44mm x 200mm	440mm x 44mm x 230mm
Power consumption	11W	29W	42W
Weight, Kg	1,1	2,42	4,7
Relative Humidity	5% ~ 95%, non-condensing		
Power Input	AC: 100~240VAC, 50~60Hz	AC: 100~240VAC,50~60Hz DC: 11-13V	AC: 100~240VAC, 50~60Hz
Operating Temperature	0°C ~ 50°C		
Storage Temperature	-40°C ~ 70°C		
Physical protection	Lightning Protection Level: 4KV		
Cooling	passive		active
MTBF	>80,000 hours		
EMC safety	CE, RoHS		
Features			
Forwarding Mode	Storage and Forwarding		
VLAN	Port-based VLAN, IEEE802.1Q, private VLAN, Protocol VLAN, Voice VLAN, MAC VLAN, Normal QinQ, Selective QinQ, Flexible QinQ, VLAN Translation, N:1 VLAN Translation		
DHCP	IPv4/IPv6 DHCP Client IPv4/IPv6 DHCP Relay Option 82,Option 37/38 IPv4/IPv6 DHCP Snooping, IPv4/IPv6 DHCP Server		
Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP Root Guard, BPDU Guard BPDU Forwarding		
LACP	8 groups/8 groups	16 groups/8 groups	
Multi-link Backup and Load Balance	Enhanced Multi-VLAN subnet Traffic Engineering (ULPP+ULSM)		
L2 Ring Protection	MRPP ITU-T G.8032 Loopback Detection Fast Link		
Security	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL Time Range ACL, ACL on VLAN interface Storm Control based on packets and bytes. Port Security, MAC Limit based on VLAN and Port Anti-ARP-Spoofing, Anti-ARP-Scan, ARP Binding ND Snooping DAI IEEE 802.1x, Authentication, Authorization, Accounting, Radius,TACACS+		
Multicast	IGMP v1/v2/v3 snooping, IGMP Fast leave, MVR MLD v1/v2 snooping, IPv4/IPv6 DCSCM(D)		
QoS	8 Queues Per Port Bandwidth Control Flow Redirect Classification based on ACL, VLAN ID, COS, TOS, DSCP, IPv6 Flow Label Policing Based on Port and VLAN, Single Rate single barrel double color for Policing, Remark DSCP, COS/802.1p, Precedence, TOS, SP, WRR, SWRR,DWRR for Scheduling		
Green Energy	IEEE 802.3az (Energy Efficient Ethernet), Auto Fan Speed Control, Temperature Alarm, LED Shut-of		
Maintenance and Operation Management	Xmodem/TFTP/FTP, CLI, Telnet, Console, Web/SSL (IPv4/IPv6), SSH (IPv4/IPv6) SNMPv1/v2c/v3, SNMP Trap, Public & Private MIB interface RMON 1,2,3,9 Ping, Trace Route Radius Authentication Syslog (IPv4/IPv6) SNTP/NTP (IPv4/IPv6) Dual IMG, Multiple Configuration Files Port Mirror, CPU Mirror, RSPAN, ERSPAN sFlow OAM* VCT, DDM, ULDP(like Cisco UDLD), LLDP/LLDP MED		

All features with * mark will be available by firmware upgrade.

Ordering Information

Product	Description
SNR-S2965-8T	L2 Intelligent Ethernet Switch with 6 10/100Base-T, 2x10/100/1000Base-T and 2 100/1000Base-X(SFP) ports. 100-240VAC Power Input
SNR-S2965-24T	L2 Intelligent Ethernet Switch with 20 10/100Base-T, 4x10/100/1000Base-T and 4 100/1000Base-X(SFP) ports. 100-240VAC Power Input, 12VDC RPS port
SNR-S2965-48T	L2 Intelligent Ethernet Switch with 44 10/100Base-T, 4x10/100/1000Base-T and 4 100/1000Base-X(SFP) ports. 100-240VAC Power Input

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