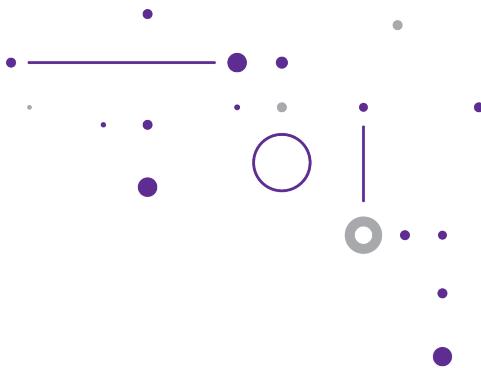
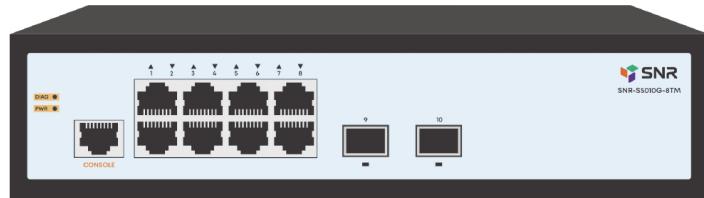


SNR S5010 series

L2 managed Ethernet switches



- The SNR S5010 series switches are the most affordable solution in their class with 2.5/10G SFP/SFP+ Uplink ports.

- The port capacity and functionality of the series provides the ability to build a gigabit access level in corporate networks and in the networks of telecom operators.

Main features:

- 1/2.5/10G SFP/SFP+ Uplink ports
- Wide range of security features
- Non-blocking switching matrix
- Simple configuration via SNR CLI
- Built-in surge protection on all copper ports

Switch models

Model	10/100/1000Base-T	Combo ports 10/100/1000Base-T 100/1000Base-X SFP	100/1000/2500Base-X SFP	1/10G SFP+
SNR-S5010G-8TM(-POE)	8	-	2	-
SNR-S5010G-24TC(-POE)	24	4	-	-
SNR-S5010G-24TX(-POE)	24	-	-	2

High performance

The S5010 series switches are built with modern chipsets and have a non-blocking switching matrix that allows all switch ports to operate simultaneously at full speed. It also guarantees high performance and minimal network latency.

Model	Switching Capacity	Forwarding Rate	MAC
SNR-S5010G-8TM(-POE)	26 Gbps	19,3 Mpps	16K
SNR-S5010G-24TC(-POE)	56 Gbps	41,7 Mpps	16K
SNR-S5010G-24TX(-POE)	88 Gbps	65,4 Mpps	16K

Resilience

For organizing resilient networks, support for standard protocols STP/RSTP/MSTP.

Link aggregation functionality using LACP or static aggregation allows combining up to 8 ports into one logical interface, increasing the bandwidth ability and resilience at the data link level.

Due to equipping each RJ-45 port with surge protection, the switch components are protected from damage when high voltage applied to the port.

Multicast management

The switches have all the necessary functionality for managing multicast at Layer 2: IGMP snooping, MVR, IGMP packet filtering, and multicast traffic filtering. This enables the efficient transport of multicast-based services, such as IPTV.

Operational convenience

The S5010 series SNR switches have a convenient and intuitive CLI. The system supports all the necessary functionality of the Enterprise/ISP level for building modern data networks and has extensive management and monitoring capabilities via CLI and SNMP.

Quality of Service (QoS)

Support for 8 hardware queues per port allows creating flexible service policies for different types of traffic, thus ensuring high quality of sensitive services under high load conditions. Traffic can be classified by field values in L2-L4 headers, including CoS, DSCP, VLAN ID, IP/MAC addresses, and TCP/UDP ports.

Model	Multicast group	Queues per Port	ACL
SNR-S5010G-8TM(-POE)	512	8	1280
SNR-S5010G-24TC(-POE)	512	8	1280
SNR-S5010G-24TX(-POE)	512	8	1280

Security

The S5110 series switches provide a wide range of security features for both service providers and enterprise networks. Hardware Access Control Lists (ACLs) can filter traffic by L2-L4 header fields without performance brake.

PoE+ support

The S5010 series SNR switches support PoE 802.3af и PoE+ 802.3at standards with a smart capacity management. The PoE technology reduces cost of ownership and makes network maintenance easier. It allows to supply with power directly from switch different types of equipment such as WiFi hotspots, IP/Video phones, thin clients and others.

Model	Number of PoE ports	Total PoE capacity
SNR-S5010G-8TM-POE	8	125 Watt
SNR-S5010G-24TC(-POE)	24	185 Watt
SNR-S5010G-24TC(-POE)	24	185 Watt

Power supply

The switches are powered by a built-in AC power supply. current 90-264V AC.

Technical Brief:

Switching type

- Store-and-Forward

MAC address table features

- Limiting max number MAC addresses on a port, switch
- Static MAC addresses
- MAC-notification*

Flow Control

- 802.3x Flow Control

Jumbo frame

- 12 Kbytes

Flash memory size

- 64 Mbytes

RAM size

- 256 Mbytes

Loopback Detection

- Per-port
- Per-vlan

VLAN

- 4094 VLAN
- Protocol VLAN*
- Voice/MAC VLAN*
- VLAN Translation*
- Private VLAN

Spanning Tree

- 802.1D STP
- 802.1W RSTP
- 802.1S MSTP
- Root/BPDU Guard
- BPDU Forwarding
- BPDU-Tunnel

Port Aggregation

- LACP 802.3ad / 802.1ax
- Up to 8 groups per switch / up to 8 ports in group
- Load balance src/dst MAC, src/dst IP

QinQ

- Port-Based
- Selective QinQ

Traffic Mirroring

- Support 4 groups
- One-to-one / Many-to-one
- RSPAN

Ring Protection

ERPS ITU-T G.8032

ACL

- 1280 ACL
- Filtering based on: switch port, VLAN ID, COS, 802.1p priority, MAC-address, EtherType, IPv4-address, IPv6-address*, ToS, DSCP, protocol type, port number TCP/UDP
- Userdefined ACL
- ACL for telnet/SSH connections

DHCP

- IPv4 DHCP Client/Relay
- IPv4/IPv6 DHCP Snooping
- Option 82, Option 37/38
- DHCP Snooping Binding (IP Source Guard)
- DHCP Server

QoS

- 8 queues per port
- Bandwidth Control
- Traffic classification per port, ACL, VLAN ID, CoS, ToS, DSCP, IPv6 Flow Label, TCP/UDP ports, protocol type, traffic class IPv6, IPv4
- Remarking DSCP, CoS/802.1p, Precedence, ToS
- SP, WFQ

Security	Management and monitoring	Logging
<ul style="list-style-type: none"> · SSH v1/v2 · SSL v1/v2/v3 · Limiting the number of MAC addresses on a port · MAC Authentication Bypass* · Limiting Broadcast/Multicast/Unicast packets on a port by pps/Kbps · Access Management (IP-MAC-Port Binding) · Port Security · Port Isolation · CPU protection · Dynamic ARP inspection (DAI) · RA Snooping · SAVI 	<ul style="list-style-type: none"> · TACACS+ · RADIUS · 802.1x* · Different levels of user privileges · Passing privilege levels via RADIUS/TACACS+ · SCP/SFTP/TFTP/FTP, CLI, Telnet, Console · SSH · SNMPv1/v2c/v3, SNMP Traps, Public & Private MIB interface · NTP · ZTP · Password encryption · Backup and restore settings · Ping, Traceroute · Syslog (IPv4) · VCT, DDM · Multiple IP Interface · LLDP · Virtual Cabel Test (VCT) · PPPoE Intermediate agent · Packet-capture* · Dying gasp* · ULDP 	<ul style="list-style-type: none"> · RAM logging · Flash logging · Logging to Syslog server · Configuring the logging level · Logging executed command
Multicast		Humidity
<ul style="list-style-type: none"> · 512 IGMP groups · IGMP v1/v2/v3 snooping · IGMP Fast leave · IGMP Snooping Querier · Multicast VLAN Registration · IGMP Filter · IGMP limit 		<ul style="list-style-type: none"> · 5%-90%, no condensation
		Operating temperature
		<ul style="list-style-type: none"> · -10C ~ 50C
		Storage temperature
		<ul style="list-style-type: none"> · -40C ~ 70C
		Surge protection
		<ul style="list-style-type: none"> · Up to 4 kV

* - functionality will be implemented in future software versions

Ordering information

Model	Description
SNR-S5010G-8TM	L2 managed ethernet switch, 8 x 10/100/1000Base-T, 2 x 1/2.5G SFP. Power: 90-264V AC
SNR-S5010G-8TM-POE	L2 managed ethernet switch, 8 x 10/100/1000Base-T, 2 x 1/2.5G SFP. Power: 90-264V AC. POE 125W
SNR-S5010G-24TC	L2 managed ethernet switch, 24 x 10/100/1000Base-T, 4 x 1/10GbE SFP+. Power: 90-264V AC
SNR-S5010G-24TC-POE	L2 managed ethernet switch, 24 x 10/100/1000Base-T, 4 x 1/10GbE SFP+. Power: 90-264V AC. POE 185W
SNR-S5010G-24TX	L2 managed ethernet switch, 24 x 10/100/1000Base-T, 4 x 1/10GbE SFP+. Power: 90-264V AC
SNR-S5010G-24TX-POE	L2 managed ethernet switch, 24 x 10/100/1000Base-T, 4 x 1/10GbE SFP+. Power: 90-264V AC. POE 185W

NAG LLC

620016, 12a Krasnolesya, str, Ekaterinburg, Russia
Tel +7(343)379-98-38 e-mail: sales@nag.ru

[Website](#)

SNR switch community
[on forum.nag.ru](#)

NAG technical support
[portal](#)

Firmware and
Documentation

