



## N10GSM series

(Niveo Professional Managed 10G Switch series)

**More information:**

[WWW.NIVEOPROFESSIONAL.COM](http://WWW.NIVEOPROFESSIONAL.COM)

[INFO@NIVEOPROFESSIONAL.COM](mailto:INFO@NIVEOPROFESSIONAL.COM)



## Product Specification

The N10GSM Managed 10G Switch series are available in below configurations:

N10GSM8T8	176Gbps,130.944Mpps 8 x 10G SFP+ optical ports 8 x 10/100/1000M RJ45 1 Console port
N10GSM8T12	258Gbps,192Mpps 12 x 10G SFP+ optical ports 8 x 10/100/1000M RJ45 1 Console port
N10GSM1T24	484Gbps,360.092Mpps 24 x 10G SFP+ optical ports 1 x 10/100/1000M RJ45 port 1 Console port
N10GSM4QT48	1280Gbps,852Mpps 48 x 10G SFP+ optical ports 4 x 40G QSFP+ optical ports 1 Console port 1 OOB Port
N10GSM2C12	280Gbps,267.84Mpps 12 x 1G/10G RJ45 electrical ports 2 x 10G SFP+ optical 1 OOB 1 Console port
N10GSM2C8	200Gbps 148.8Mpps 8 x 1G/10G RJ45 ports 2 x 10G SFP+ optical ports 1 OOB 1 Console port

### Introduction

The N10GMS-series are managed 10 Gigabit switches providing a maximum of 1280Gbps switching capacity, making it the the highest performance (1U TOR)in the industry. The range offers a a maximum of 852.32 Mpps forwarding performance with L2/ L3 full wire-speed forwarding. The modular design, provides up to 48 10G SFP+ optical ports, 1 Console port and up to 12 10/100/1000M RJ45 electrical ports, offering enough bandwidth for data aggregation and data exchange, especially when high and fast data transmission is needed such as deployment of 4K Video.



## High density 10G access, performance is remarkable

- with a maximum 1280Gbps backplane capacity, the N10GMS switch series are the highest performance(1UTOR) switches in the industry
- The hardware packet forwarding rate of the wire speed layer 3 switching can reach 852,32Mpps, L2 / L3 full speed forwarding;

## Convenient Maintenance

- (1) able to be managed via Web, SNMP, etc
- (2) support XModem protocol, use TFTP/ZMODEM for software upgrading and BootRom upgrading
- (3) support SFP+, simultaneously downward compatible XFP
- (4) support flexible port configuration

## Powerful Flow and Broadcast Management

- (1) automatically detect and control broadcast storm, support IGMP packets detection, effectively limit the flooding of broadcast packets.
- (2) support Ethernet interface taking 1M as the step length for rate limiting

## Safe and Reliable

- (1) provide DOS, DDOS, spoofing and virus defense
- (2) support IEEE802.1x, provide port-based user authentication, network shield, safety control, and policy control technology
- (3) restrict the maximum number of hosts connected with the port, multi-binding Ethernet interface, increasing bandwidth and system redundancy

## Specifications

Model	N10GSM8T8	N10GSM8T12	N10GSM1T24	N10GSM4QT48	N10GSM2C12	N10GSM2C8
<b>Basic Configuration</b>						
10G-SFP-ports	8	12	24	48	2	2
40G QSFP ports	-	-	-	4	-	-
10/100/1000M RJ45 ports	8	8	1	-	-	-
1G/10G RJ45 ports	-	-	-	-	12	8
Console ports	1	1	1	1	1	1
OOB management port	-	-	-	1	1	1
Backplane bandwidth	176Gbps	258Gbps	484Gbps	1280Gbps	280Gbps	200Gbps
Packet forwarding rate	131.Mpps	192Mpps	360Mpps	853Mpps	267Mpps	149Mpps
Jumbo frames	12K	12K	12K	9K	1522	1522
Support store-forward mode and cut-through mode	yes	yes	Yes	yes	yes	yes
IPv4/IPv6 route	512/256	512/256	512/256	6K/8K	512/256	512/256



<b>MAC address table</b>	16K	16K	16K	128K	16K	16K
<b>Packet Buffer</b>	2MB	2MB	4MB	9MB	2MB	2MB
<b>VLAN ID</b>	4K	4K	4K	4K	4K	4K
<b>Memory</b>	512MB	512MB	32MB	32MB	512MB	512MB
<b>Flash memory</b>	8MB	8MB	256MB	1GB	16MB	16MB
<b>Software Specification</b>						
<b>Security</b>	IP+MAC+PORT+VLAN binding ARP inspection DOS defend Port protection IP Source Guard binding					
<b>VLAN</b>	Port based VLAN 802.1QVLAN IP based VLAN MAC based VLAN					
<b>MAC address table</b>	Static MAC address table Dynamic MAC address Table					
<b>Storm Control</b>	Broadcast suppression Multicast suppression DLF suppression Rate Limiting					
<b>Traffic Control</b>	Half-duplex control based on back pressure type Full-duplex control based on PAUSE frame					
<b>Port Mirroring</b>	Supported					
<b>Port management</b>	General Settings Port counting Port Configuration Port trunk Port Isolation					
<b>QoS</b>	IEEE 802.CQ congestion mechanism 8 send queue mapping 8 802.1P priority					
<b>IP services</b>	Ping detection DHCP snooping					
<b>Spanning Tree Protocol</b>	MSTP9802.1s) STP RSTP					
<b>Multicast management</b>	IGMP snooping frame					
<b>System management</b>	SNMPv1/v2, Console Telnet SSH, Web					