



## **N10GSM series**

(Niveo Professional Managed 10G Switch series )

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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		
N10GSM4QF48	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 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 hard ware 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	N10GSM8F8	N10GSM8F12	N10GSM1F24	N10GSM4QF48	N10GSM2C12	N10GSM2C8			
Basic Configuration									
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	yes	yes	Yes	yes	yes	yes			
mode and cut-through									
mode									
IPv4/IPv6 route	512/256	512/256	512/256	6K/8K	512/256	512/256			



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

