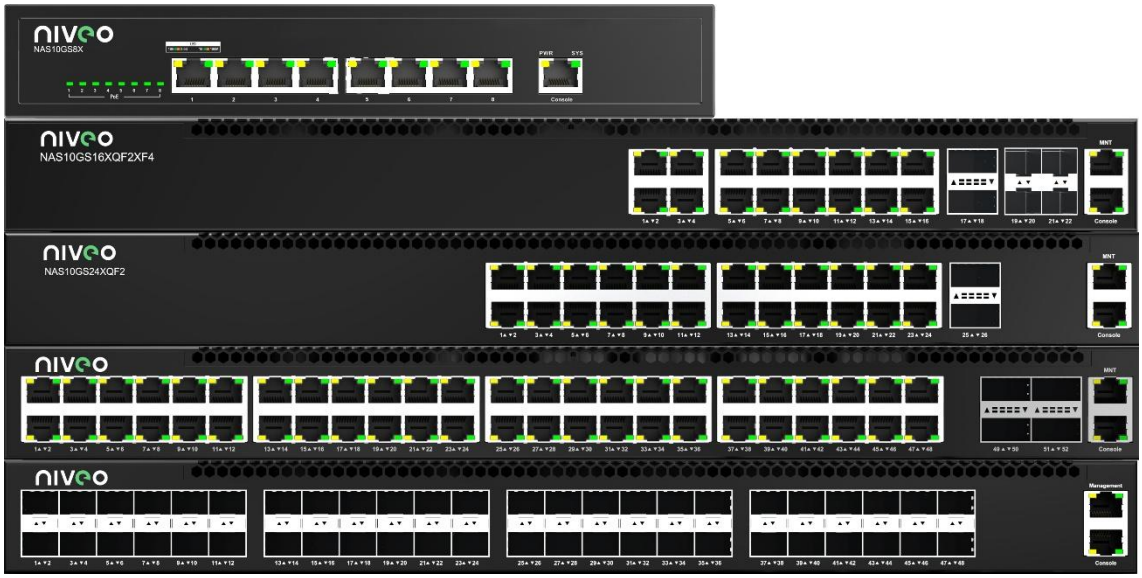
WE MAKE NETWORKING EASY!

Niveo Professional 10Gb AV Series

10Gb AV Layer 3 Gigabit Switches:

NAS10GS8X	8 Port 10Gb PoE+ switch, Layer 2/3 Mgt
NAS10GS16XQF2XF4	16 Ports 10G PoE Layer 3 Switch with 2* 40G QSFP+ Ports and 4*10G SFP+ Ports
NAS10GS24XQF2	24 Ports 10G PoE Layer 3 Switch with 2*40G QSFP+ uplink ports
NAS10GS48XQF4	48 Ports 10G PoE Layer 3 Switch with 4*40G QSFP+ uplink ports
NAS10GS48FX	48 Ports 10G SFP+ Layer 3 Switch



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General

The Niveo Professional 10Gb AV Series is a next-generation, Layer 3, 10 Gigabit Switch series. It is an ideal solution for demanding Video-over IP solutions and other networks demanding high bandwidth. The series is **designed by AV-professionals, for AV-professionals.**
The interface offers a full **profile configuration**, for easy deployment. The switches are capable of delivering unblocked Layer3 switching for demanding SDVoE and IPMX setups.

Features

- Easy to Configure though profiles
- SDVoE Ready
- Aggregate for large deployments
- Supports Dante, NDI, AV over IP, SDVoE, IPMX, Q-sys, AES67, Ravenna
- Supports 8-16-24-48 port PoE+
- Supports QoS, DHCP, BGP, VRRP, QinQ, etc.
- Supports WEB/CLI/SNMP/SSH for Flexible Operation
- Supports SSH, ACL, AAA, 802.1X, RADIUS, TACACS+, etc. for Security
- IPv4/IPv6 Dual-Stack for Future Network Expansion

Specifications

Model number	NAS10GS8X	NAS10GS16XQF2XF4	NAS10GS24XQF2	NAS10GS48XQF4	NAS10GS48FX
Performance					
Networking Interfaces	8 x 10Gb +	16 x 10Gb + 4 x10GbSFP+ 2 x40GB QSFP	24 x 10Gb + 2 x40GbQSFP+	48 x 1oGb + 4 x40Gb QSFP+	48x SFP+
Switching Capacity	160Gbps	560Gbps	640 Gbps	1280Gbps	960Gbps
Forwarding Capacity	119 Mpps	375 Mpps	476 Mpps	980 Mpps	714 Mpps
Forwarding Mode	Store and Forward				
Packet Buffer Memory	12Mbit	32 Mbit		72Mbit	72Mbit
RAM for CPU	1 Gbit	8 Gbit		8 Gbit	2Gbit
Flash memory	256 Mbit	512 Mbit	512 Mbit	256Mbit	128Mbit

MAC Address table	16K	32K		128K	128K
Max. Jumbo Frame Size	12K				
ACL Tabler	512	1K			
L3 Interface					512
VLAN Quantity	4K				
VLAN Interface	32				
Multicast Groups	1K	4K			
Routing host	16K				
Routing Entries	16K				
Port Queues	8				
PoE budget	Verify budget	Verify budget	Verify budget	Verify budget	X
Physical					
Dimensions (cm)	27x20x4.4	44x28x4.4	44 x20x4.4	44x28x4.4	44x35x4.4
Weight	3kg	5kg	5 kg	6 kg	5kg
Operating temperature	0 to 40℃				
Storage Temperature	-10 to 70℃				
Operating Humidity	5 to 95% Noncondensing				
Power method	100-240VAC, 50/60Hz				
Total power board capacity	150W	400W	450W	900W	x
EMC Safety	FCC, CE, RoHS				
Power over Ethernet					
PoE Interfaces	1-8	1-16	1-24	1-48	x
PoE Standard	IEEE802.3af, IEEE802.3at				x
Max. PoE Wattage per Port	30W				x
PoE Voltage	52VDC	54VDC		54VDC	x
PoE Pin Assignment	V- (RJ45 Pin1,2), V+ (RJ45 Pin 3,6) for 802.3at				x
PoE Management	Port-base PoE status view and control				x

Port Configuration	
Enable and Disable	Support control enable and disable
Auto-Negotiation	Support force port mode and speed
Flow Control	Support IEEE802.3x full-duplex Support half-duplex backpressure
Storm Control	Support broadcast, multicast, DLF pack rate limit
Port Mirroring	Support many to one mirroring
Rate Limit	Support Port input and output rate limit
Link Aggregation	Support manual Link Aggregation Support LACP Up to 8 maximum aggregation groups, each containing up to 8 ports (32 groups and 32 ports for 48P switches)
Aggregation Strategy	Source MAC / Destination MAC / Source Destination MAC Source IP / Destination IP / Source Destination IP
Port Protection	Each port can be configured into isolated protected port
MAC Configuration	
MAC Address Table Mgt	Support
Transfer Mode	Support IVL transfer mode
Static MAC Address	Support
MAC Binding	Support
MAC Address Filter	Support
MAC Quantity Limitation	Support limit the number of MAC-addresses Learning per port
VLAN Configuration	
VLAN Based on 802.1Q	Support
MAC-Based VLAN	Support
IP-Based VLAN	Support
Protocol-Based VLAN	Support
Guest VLAN	Support
Private VLAN	Support
Reliability Protocol	
Spanning Tree	Support STP/RSTP/MSTP

BPDU Guard	Support
BPDU Filter	Support
Port Loop Detection	Support
EAPS Protocol	Support RFC3619
ERPS Protocol	Support
DLDP Protocol Support DLDP	Support DLDP
LLDP Protocol	Support LLDP and LLDP-MED
UDLD Protocol	Totally compatible with UDLD protocol of CISCO
L3 Routing	
ARP	Support static and dynamic ARP
Static Routing	Support
Policy Routing	Support
RIP	Support RIP v1/v2
OSPF	Support OSPF v2
VRRP	Support
DHCP relay at Layer 3	Support
Multicast	
Static Multicast MAC Address	Support
IGMP	V1/v2/v3
IGMP SNOOPING	Support
IGMP Querier	Support
IGMP Filter	Support
MVR	Support
GMRP	Support
Access Control List (ACL)	
Based on Standard IP	Support
Based on Extend IP	Support
Based on MAC IP	Support
Based on MAC ARP	Support
Based on time	Support
Port Filtering	Support

Quality of Service (QOS)	
Scheduling Mode	Support WRR，RR，WDRR，SP
Sorting Based on Port	Support
Sorting Based on 802.1p	Support
Sorting Based on DSCP	Support
DHCP	
DHCP Client	Support
DHCP Relay	Support
DHCP Server	Support
DHCP option	Support
DHCP Snooping	Support
Security	
Administrative Security	Support start and end TELNET, WEB and SNMP serve Support TELNET, WEB and SNMP serve binding with Standard IPACL Support control the number of user for TELNET
CPU Protect	Switch self-security protect, forbid flow attack
IP-MAC Address Binding	Support binding between static configuration IP, MAC and Port
AAA	Support 802. 1x protocol Support RADIUS protocol Support RADIUS server authentication authorization and bill Support MAC-based 802. 1X authentication. Support 802.1x guest VLAN
DHCP SNOOPING	Support dynamic ARP bind to prevent ARP spoofing Support dynamic IP, MAC port binding Support stationary port connect to DHCP server, to prevent privately connect to DHCP sever
Prevent ARP Spoofing	Support manual configure ACL rule based on MACARP prevent ARP spoofing Support DHCP SNOOPING function, switch dynamically binding ARP and port, when the DHCP get IP address , to prevent ARP spoofing
Management	

CLI Management	Support Console, Telnet and SSH Support multiple TELNET connections based on IPv4 and IPv6 Support multiple SSH connections based on IPv4 and IPv6	
WEB Management	Support HTTP / HTTPS based on IPv4 and Ipv6	
SNMP Management	Support SNMP protocol Support SNMP TRAP Support standard and private MIB	
User management	Support multi-user management	
Show CPU Utilization	Support	
Show RAM Utilization	Support	
Log Management	Support local log management Support SYSLOG	
Config Download / Upload	Support Web / TFTP transmission based IPv4 / IPv6	
Upgrade Firmware	Support Web / TFTP transmission based IPv4 / IPv6	
Timer Management	Support local timer management Support SNTP protocol get clock	
Debugging Tools		
PING	Support	
TRACEROUTE	Support	
TELNET Client	Support	
Package List		
AV Switch	1pce	
User Manual	1pce	
Power Cord	1pce	
DB9 to RJ45 Cable	1pce	
Rack Mount Kit	1pce	2 pcs
Rubber Feet	4pcs	

Order Information

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