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Niveo Professional Enterprise Series

NGSME48T4Hv2

48-port Gigabit Ethernet switch with full Layer 2+ management.
Four 10GbE SFP+ slots and a 520 W PoE+ budget.



PRODUCT DATASHEET

NGSME48T4Hv2

Product Specification

Introduction

The switch is 48-port 10 Base-T /100 Base-TX /1000Base-T + 4 x 10 Gigabit SFP+ Ports Rack-mount L2+ Full Management Network

Switch that is designed for medium or large network environment to strengthen its network connection. The switch supports 176G non-blocking switch fabric, the 48 gigabit ports and 4 uplink 10G ports can transmit and receive data traffic without any lost. The EEE feature reduces the power consumption when there is no traffic forwarding even port is still connected. The switch also supports Layer 2+ full management software features. These features are powerful to provide network control, management, monitor and security feature requests. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

4 10-Gigabit SFP Open Slots

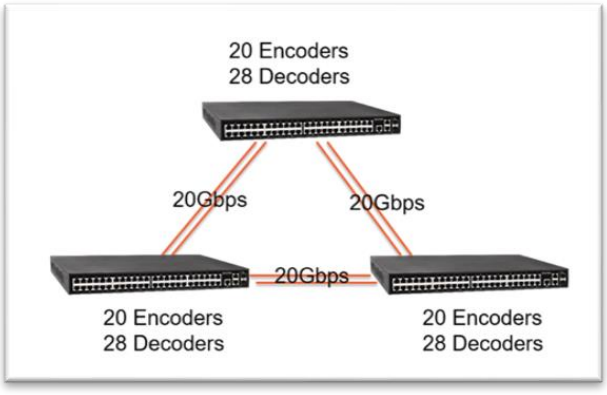
The switch equips with 4x 10G SFP+ open slots as the uplink ports, the 10G uplink design provides an excellent solution for expanding your network from 1G to 10G. By 10G speed, this product provides high flexibility and high bandwidth connectivity to another 10G switch or the Servers, Workstations and other attached devices which support 10G interfaces. The user can also aggregate the 10G ports as Trunk group to enlarge the bandwidth.

Full Layer 2+ Management Features

The switch includes full Layer 2+ Management features. The software set includes up to 4K 802.1Q VLAN and advanced Protocol VLAN, Private VLAN, MVR...advanced VLAN features. There are 8 physical queues Quality of Service, IPv4/v6 Multicast filtering, Rapid Spanning Tree protocol to avoid network loop, Multiple Spanning Tree Protocol to integrate VLAN and Spanning Tree, LACP, LLDP; sFlow, port mirroring, cable diagnostic and advanced Network Security features. It also provides Console CLI for out of band management and SNMP, Web GUI for in band Management.

Designed for Video-over-IP applications

The switch management Layer 3 functionality has been optimized for use with Video over IP applications. Easy to configure and with a non-blocking architecture. With the total of 40Gb uplinks/virtual stacking ports per switch, Video over IP designs of up to 2300 end points can be supported.



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Advanced Security

The switch supports advanced security features. For switch management, there are secured HTTPS and SSH, the login password, configuration packets are secured. The port binding allows to bind specific MAC address to the port, only the MAC has the privilege to access the network. The 802.1X port based Access Control, every user should be authorized first when they want to access the network. AAA is the short of the Authentication, Authorization and Accounting with RADIUS, TACAS+ server. Layer 2+ Access Control List allows user to define the access privilege based on IP, MAC, Port number...etc.

IEEE 802.3at Power over Ethernet (PoE) ports

This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at/af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3at/af compliant, or only the data will be sent through LAN cable. By adding the switch to the existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up.

PD Monitoring: Self-healing Intelligent PoE ports

When this function is enabled, the switch will detect a network PoE powered device (for example, an IP CAM) with a set of IP address periodically. If the switch doesn't get any replies from the network PoE powered device, the switch will do a power cycle (PoE power OFF, and PoE power ON) to the port that connects the network PoE powered device, allowing that device to reboot. You can set the frequency of detecting, number of times of detecting, and the time period to perform power cycle when there's no reply via the switch's PoE configuration web page.

Specifications

Interface	
10 Base-T /100 Base-TX /1000 Base-T RJ45 Ports	48
10G SFP+ Slot	4
Console Port for CLI Management	1
System Performance	
Packet Buffer	32Mbits
MAC Address Table Size	32K
Switching Capacity	176Gbp
Forwarding Rate	130.94Mbps
PoE Features	
IEEE 802.3 af/at	IEEE 802.3 af/at
Number of PSE Ports	48
PoE+ budget	520 W

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External/Internal Power		Internal Power
Power Feeding Detecting Capability on PD		√
PD Alive Check		√
PD Classification		√
Power Management (per-port)	Enable/Disable PoE Per Port	√
	Priority Setting Per Port	√
	Power Level Setting Per Port	√
	Overloading Protection	√
L2 Features		
Auto-negotiation		√
Auto MDI/MDIX		√
Flow Control (duplex)	802.3x (Full)	√
	Back-Pressure (Half)	√
Spanning Tree	IEEE 802.1D (STP)	√
	IEEE 802.1w (RSTP)	√
	IEEE 802.1s (MSTP)	√
VLAN	VLAN Group	4K
	Tagged Based	√
	Port-based	√
	Voice VLAN	Voice VLAN with OUI
Link Aggregation	IEEE 802.3ad with LACP	√
	Static Trunk	√
	Max. No. Static Trunk Group	26
	Max. Port per Aggregation Group	8
IGMP Snooping	IGMP Snooping v1/v2/v3	Supports 1024 IGMP groups
	IGMP Static Multicast Addresses	Supports 1024 static multicast addresses
	IPv6 MLD Snooping	Supports 1024 MLD groups
	MLD Static Multicast Addresses	Supports 1024 static multicast addresses
	Querier, Immediate Leave	√
Storm Control (Broadcast/Multi-cast/Un-known Unicast)		√
Jumbo Frame Support		9.6KB
QoS Features		
Number of priority queue		8 queues/port
Rate Limiting	Ingress	Yes, 1KBps/1pps
	Egress	Yes, 1KBps/1pps
Mapping Table entries	Ingress	4K
	Egress	8K
DiffServ (RFC2474 Remarking)		√
Scheduling (WRR, Strict, Hybrid)		√
CoS	IEEE 802.1p	√
	IP ToS precedence, IP DSCP	√
Security		
Management System User Name/Password Protection		√
User Privilege		Set user privilege up to 15 Level
Port Security (MAC-based)		√
IEEE 802.1x Port-based Access Control		√
ACL (L2/L3/L4)		√
IP Source Guard		√
RADIUS (Authentication, Authorization, Accounting)		√
TACACS+		√
HTTP & SSL (Secure Web)		√
SSH v2.0 (Secured Telnet Session)		√

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MAC/IP Filter	√

Management	
Command Line Interface (CLI)	√
Web Based Management	√
Telnet	√
Access Management Filtering	SNMP/WEB/SSH/TELNET
Firmware Upgrade via HTTP	√
Dual Firmware Images	√
Configuration Download/Upload	√
SNMP (v1/v2c/v3)	√
RMON (1,2,3,&9 groups)	√
DHCP (Server/Client/Relay/Option82/Snooping)	√
System Event/Error Log	√
NTP/LLDP	√
Cable Diagnostics	√
IPv6 Configuration	√
Port Mirroring	Many to One
Virtual Stacking	√
Mechanical	
Power Input	100~240V AC
Dimension (H*W*D)	44 * 440 * 400 mm
LED	Power, PoE, Link/Act, SFP
Operating Temperature	0~45°C
Storage Temperature	-20~80°C
Operating Humidity	5~90% (non-condensing)
Weight	5.37 KG
Certification	VCCI, FCC Class A
Standard	
IEEE 802.3 – 10BaseT	√
IEEE 802.3u - 100BaseTX	√
IEEE 802.3ab - 1000BaseT	√
IEEE 802.3ae 10GBase SFP+	√
IEEE 802.3af Power over Ethernet (PoE)	√
IEEE 802.3at Power over Ethernet (PoE+)	√
IEEE 802.3az - Energy Efficient Ethernet (EEE)	√
IEEE 802.3x - Flow Control	√
IEEE 802.1Q - VLAN	√
IEEE802.1v - Protocol VLAN	√
IEEE 802.1p - Class of Service	√
IEEE 802.1D - Spanning Tree	√
IEEE 802.1w - Rapid Spanning Tree	√
IEEE 802.1s - Multiple Spanning Tree	√
IEEE 802.3ad - Link Aggregation Control Protocol (LACP)	√
IEEE 802.1AB - LLDP (Link Layer Discovery Protocol)	√
IEEE 802.1X - Access Control	√