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Niveo Professional Enterprise Series

NGSME24T2H / NGSME24T2H-AV

24-port Gigabit PoE+ managed switches with two Gigabit SFP ports. Front- and rear-facing variants.



PRODUCT DATASHEET

NGSME24T2H / NGSME24T2H-AV

Product Specification

Introduction

NGSME24T2H is 24-port 10/100/1000Base-T + 2 Gigabit SFP L2+ Management Current Sharing PoE Switch that is designed for medium or large network environment to strengthen its network connection. The 24 10/100/1000Base-T ports support IEEE 802.3at PoE technology, up to 30W per port and maximum 100m transmission distance. The switch uses current sharing to supply its PoE ports.

The two SFP slots support 100 Mb/s and Gigabit fiber transceivers for long distance transmission. The switch also supports Layer 2+ full management software features. These features are powerful to provide PoE Control, Network Control, Management, Monitor and Security features' requests. It is a superb choice to boost your network with better performance, efficiency and high PoE power consumption.

Current Sharing PoE

The current catalog configuration has a 385 W total PoE budget and a 420 W power board.
Two power modules share the load for the 24 PoE ports.
If one power module fails, available PoE power is reduced.
Use PoE port priorities to keep critical devices powered within the available budget.

2 Gigabit SFP Open Slots

NGSME24T2H is a 26-port design. It supports 2 additional SFP open slots to uplink to servers, storage, or other switching devices for long loop reach applications. The 2 SFP slots can support different types, speed and distance SFP transceivers. It also supports legacy 100M SFP transceiver. If the 100M fiber infrastructure is constructed and 100M bandwidth is enough, the 100M SFP transceiver can be an optional choice for the legacy 100M network environment.

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.

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.

Specifications

Standards	Ethernet: IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3az EEE PoE: IEEE 802.3at PoE+ Protocol: IEEE 802.3x - Flow Control, IEEE 802.1Q – 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), IEEE802.1v - Protocol VLAN, IEEE 802.1AB - LLDP (Link Layer Discovery Protocol), IEEE 802.1X - Access Control
Interface	Number of Port: 26 10/100/1000Base RJ-45 Port: 24, Auto-negotiation, Auto MDI/MDIX 100/1000Base-X SFP: 2
Performance	Switch Fabric: 52Gbps MAC Address Table Size: 8K Forwarding Rate: 38.7Mpps Packet Buffer: 4Mb
PoE Features	**802.3af/at Compliant** **Max. Power Output Per Port:** 30W **PoE budget / board capacity:** 385 W / 420 W **PoE Management:** Enable/Disable per-port Priority Setting per-port Maximum Power per-port/system PoE Mode Setting per-port PD Classification, PoE Status
L2 Features	**Flow Control:** 802.3x (Full-duplex)ort/ Back-Pressure (Half-duplex) **Spanning Tree:** IEEE 802.1D-2004(Includes IEEE 802.1w): Rapid Spanning Tree Protocol 802.1s Multiple Spanning Tree Protocol **Loop Detection**

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	VLAN: IEEE 802.1Q Tagged Based, Max. VLAN Group: 4K QinQ Port-based VLAN Voice VLAN Private VLAN MVR MAC-Based VLAN Protocol-Based VAN **Link Aggregation:** Static Trunk & IEEE 802.3ad with LACP Max. Group: 13 Max. Ports/Group: 16 **IGMP Snooping:** IGMP Snooping v1/v2/v3 IPv6 MLD Snooping v1/v2 Querier support/ IGMP Filtering, IGMP Leave Proxy, Immediate Leave **Storm Control:** Broadcast/ Multi-cast/ Un-known Unicast **Jumbo Frame Support:** 9K
QoS Features	**Number of Priority queue:** 8 queues/ port **Scheduling for priority queue :** WRR/Strict Priority scheduling/Hybrid **CoS :** 802.1p/ IP Precedence/ IP TOS Precedence IP DSCP/ Port based Priority **Rate Limiting:** Ingress/Egress: 1Kbps/ 1pps granularity **DiffServ (RFC2474) remarking**
Security	**User Name / Password Protection** **User Privilege:** up to 15 levels **IEEE 802.1x:** Port-based Access Control **IP Source Guard** **MAC Based Authentication** **Web-based Authentication** **HTTPS** **SSHv2** **RADIUS:** Authentication/ Accounting **TACACS+:** Authentication **ACL (Access control list)**
Management	**Command Line Interface (CLI)** **Web Based Management** **Telnet** **Access Management Filtering:** SNMP/WEB/SSH/TELNET **SNMP:** v1/v2c/v3 **RMON:** RMON (1,2,3, & 9 groups) **DHCP:** Client/ Relay/ Option82/ Snooping

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	Event/Error Log **Software Download/ Upgrade:** HTTP **Configuration Download / Upload** **sFlow** **Port Mirroring:** One to One/ Many to One **Remote Ping** **NTP/LLDP** **UPnP** **EEE Configuration** **Cable Diagnostics** **IPv6 Configuration**
Power Input	100~240VAC
PoE budget and board capacity	385 W / 420 W System: max. 21.5W
Mechanical	**Dimension(H*W*D) :** 45*440*330mm / 1.77*17.32*12.99 inch **Weight :** 4.7 kg / 10.36 lbs
Operating Temperature	0~40°C/32~104 °F
Humidity	5~90% (non-condensing)
Certifications	FCC Class A, CE, c-UL-us (Q4-2013)