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Niveo Professional NRS Series

NRS16T2P

16-port Gigabit PoE+ managed switch with two Gigabit SFP ports.



PRODUCT DATASHEET

NRS16T2P

Product Specification

Introduction

The NRS16T2P is a 16 -port 10/100/1000M PoE+ with 2-port 1G SFP Open Slot Rack-mount Full Managed PoE+ Switch. The switch supports IEEE 802.3at Power over Ethernet standard, with high power budget per system.
The switch is standard 1u, 19" rack-mount design to fit into the rack environment. With these features, the switch is a superb choice for medium or large network environment to strengthen its network connection and efficiency.

IEEE 802.3at Power over Ethernet (PoE) ports

This switch features 16 IEEE 802.3at Power over Ethernet (PoE+) ports supplying up to 30 watts per port. 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 compliant network accessories.

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.

Multicasting To support Video-over-IP

The switch has a full set of multicasting feature, such as IGMP querier, snooping and Fast Leave. It will support any mainstream Video-over-IP platform out there.

PD Alive Check

When this function is enabled, The NRS16T2P will detect a network PoE powered device (for example, an IP CAM) with a set of IP address periodically.

Specifications

Interface	
10 Base-T /100 Base-TX /1000 Base-T RJ45 Ports	16
100M/1GGbps Base-X SFP Port	2
Console Port for CLI Management	1
System Performance	
Packet Buffer	4Mb
MAC Address Table Size	8K
Switching Capacity	128Gbps
Throughput	38.69Mpps@64bytes

NRS16T2P

PoE Features		
IEEE 802.3 af/at		IEEE 802.3 af/at
Number of PSE Ports		16
Max. PoE Budget		280W
Power Feeding Detecting Capability on PD		•
PD Alive Check		•
PoE Scheduling		•
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	14
	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		9KB
G.8032 - Ethernet Ring Protection Switching (ERPS)		•
QoS Features		
Number of priority queue		8 queues/port
Rate Limiting	Ingress	Yes, 1KBps/1pps
	Egress	Yes, 1KBps/1pps
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)		•
MAC/IP Filter		•
L3 Features		
Static Route		•
IPV6 neighbor discovery		•

NRS16T2P

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	•
IEEE 1588v2 - Precision Time Protocol (PTP)	•
Physical Characteristics	
Dimension (H*W*D)	Please refer to Order Information
LED	Power, Speed, Link/Act, PoE
Reset Button	1 Reset Button for Reset Default
Power Requirement	
Power Input	Please refer to Order Information
Max. System Consumption	30W
Environment Limits	
Operating Temperature	0~50°C
Storage Temperature	-20~80°C
Operating Humidity/Storage Humidity	Max. 90% RH (Non-condensing)
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	•
ITU-T G.8032/Y.1344 - Ethernet Ring Protection Switching (ERPS)	•
IEEE 1588v2 - Precision Time Protocol (PTP)	•