Product Data Sheet

NS3601-24P/4S

Enterprise-class 24-port Gigabit Backbone Network Switch

Overview

These enterprise-class switches are engineered to meet a variety of high-performance applications such as PoE distribution, optical network architectures, and high-density performance through reliable stacking technology and advance Layer 2 networking features.

Robust Layer 2 Features

For efficient switch management, via a simple, yet powerful set of built-in Web Services, the IFS 24-port Gigabit Managed Switch Series can easily be programmed for all switch management functions such as Port Speed Configuration, Port Link Aggregation, IEEE 802.1Q VLAN and Q-in-Q VLAN, Port Mirroring, Rapid Spanning Tree and ACL security. These switches also support standard Simple Network Management Protocol (SNMP) and include an advanced SNMP feature set to monitor the status of the switch and traffic per port. The switch can also be monitored via any standards-based SNMP management software.

Full Power Isolated per Port PoE

The IFS 24-port Gigabit Stackable PoE Managed Switch features IEEE 802.3af Power over Ethernet (PoE) providing optimized deployment and power management of PoE edge devices such as IP Surveillance cameras. access control panels, wireless access points (WAP) and Voice over IP (VoIP). In addition, PoE port circuit protection isolates and prevents power interference between ports.

Standard Features

- 24-ports 10/100/1000Base-T Gigabit Ethernet RJ-45 with IEEE 802.3af PoE
- 4 SFP/mini-GBIC slots shared with Ports 21 to 24 - compatible with 1000Base- SXBX/LX/LHX/ZX and 100Base-FX /BX/LX SFP transceivers
- 2 HDMI-like 10Gbps (full-duplex) stacking ports
- High-performance Switch Architecture
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Up to 68Gbps non-blocking switch fabric
- 10K bytes Jumbo frame support
- 8K MAC address table, automatic source address learning and ageing
- Full Multicast Support for IP Video - up to 256 multicast groups
- VLAN Support - up to 255 VLANs groups
- Quality of Service (QoS)
- Power over Ethernet
- Complies with IEEE 802.3af Standard
- 380 Watt Power Budget
- Auto-detects PoE powered devices (PD)
- Supports Cisco ether-Channel
- Advanced Security
- MAC Filtering and Source IP/MAC address port-binding
- Reliable and Redundant Stacking Technology
- Hardware stack of up to 16 units
- Single IP address stack management
- Port mirroring across the stack

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Specifications

Physical Ports

- 10/100/1000Base-T (X) Ports: RJ-45 (8) shared with SFP slots 1 to 8
- SFP/Mini-GBIC Slots: SFP/Mini-GBIC Slots (4) - Shared with RJ-45 Ports-21 to 24; 1000Base- SXBX/LX/LHX/ZX and 100Base- FX/BX/LX SFP transceiver compatible
- Port Configuration: Auto MDI/MDI-X
- Port Speed: Auto-negotiate

Switch Performance

- Switch Architecture: Store-and-Forward
- Switch Fabric: 68Gbps non-blocking
- Switch Throughput: 50.595Mpss@64Bytes
- Mac Address Table: 8K entries
- Share Data Buffer: 1392 kilobytes
- Jumbo Frame Size: 10Kbytes
- Flow Control: IEEE 802.3x Pause Frame for Full- Duplex, Back pressure for Half-Duplex

Layer 2 Functions

- Management Interface: Console, Telnet, Web Browser, SNMPv1, v2c and v3
- Port Configuration: Port enable/disable; Auto-negotiation; 10/100/1000Mbps full and half duplex mode selection; Flow Control enable/disable; Bandwidth control on each port
- Port Status: Display each port's: speed duplex mode, link status, flow control status, Auto negotiation status, trunk status
- Port Mirroring: TX/RX/Both; 1 to 1 monitoring
- Bandwidth Control: Ingress/Egress rate control: configure per 128Kbps
- VLAN: IEEE 802.1q tagged-based VLAN Port-based VLAN, Q-in-Q tunneling, Up to 255 VLANs groups, Private VLAN
- Link Aggregation: IEEE 802.3ad LACP / Static Trunk; Supports 12 groups of 16-Port trunks
- Quality of Service (QoS): Traffic classification based, Strict priority and WRR, 4-level priority for switching - Port Number, - 802.1p priority, - DS/TOS field in IP Packet
- Multicasting/IGMP: IGMP (v1/v2/v3) Snooping, up to 255 multicast Groups; IGMP Querier mode support, up to 255 multicast Groups; IGMP Querier mode support
- Access Control List: IP-Based ACL/MAC-Based ACL 256 entries
- SNMP MIBs (1): RFC-1213 MIB-II, IF-MIB, RFC-1493 Bridge MIB RFC-1643 Ethernet MIB RFC-2863 Interface MIB RFC-2665 Ether-Like MIB RFC-2737 Entity MIB
- SNMP MIBs (2): RFC-2618 RADIUS Client MIB RFC-2933 IGMP-STD-MIB RFC3411 SNMP-Frameworks-MIB, IEEE802.1X PAE, LLDP, MAU-MIB, Power over Ethernet–MIB

Stacking

- Maximum Stack: 16 Switches
- Stacking Interface: HDMI-Like interface (2)
- Stacking Bandwidth: 10Gbps (Full-Duplex)
- Stacking Topology: Ring / Chain / Back-to-Back stack

Power over Ethernet

- PoE Standard: IEEE 802.3af
- PoE Power Supply Type: End-Span (PSE)
- PoE Power Budget: 380 Watts
- Max. number of PD @ 15.4 Watts: 24
- Max. number of PD @ 7 Watts: 24
- PoE Power Output Per Port: 48VDC, 350mA.; 15.4 watts max.
- Power Pin Assignment: 1/2(+), 3/6(-)

LED Indicators & Switch

- Power: On/Green
- Stack Master: On/Green
- Stacking ID Display: 7-Segment LED Display (1~9, A~F,0)
- 10/100/1000Base-TX Ports: 10/100 LNK/ACT - Green; PoE in Use - Amber
- 10/100/1000Base-T/SFP Ports: 100 LNK/ACT - Green; 1000 LNK/ACT - Green
- FAN(s): Alarm/Green
- Reset Button: System reboot: push and hold < 5 sec.; Factory Default: push and hold > 5 sec.

Electrical & Mechanical

- AC Power Input Voltage: 100 ~ 240VAC, 50 / 60Hz, Auto-sensing
- Power Consumption (System On): 110V (29.3 Watts); 220V (30.2 Watts)
- Power Consumption (Full Load without PoE): 110V (39 Watts); 220V (40 Watts)
- Dimensions (WxDxH); in/cm: 17.32 x 11.81 x 1.75 in. (42.99 x 29.99 x 4.45 cm)
- Weight; lbs/kgs: 9.92 lbs, 4.49 kgs

Environmental

- Operating Temperature: 0º ~ 50ºC
- Storage Temperature: -20º ~ 70ºC
- Relative Humidity: 0% to 95% (non-condensing)

Standards Compliance

- Regulatory Standards: FCC Part 15 Class A, CE, UL, cUL
- IEEE Standards (1): IEEE 802.3 10Base-T; IEEE 802.3u 100Base-TX/100BASE-FX/BX/LX; IEEE 802.3z Gigabit SX/BX/LX/LHX/ZX; IEEE 802.3ab Gigabit 1000T; IEEE 802.3x Flow Control and Back pressure; IEEE 802.3ad Port trunk with LACP; IEEE 802.1d Spanning tree protocol
- IEEE Standards (2): IEEE 802.1w Rapid spanning tree protocol; IEEE 802.1p Class of service; IEEE 802.1Q VLAN Tagging; IEEE 802.1x Port Authentication Network Control; IEEE 802.1ab LLDP; IEEE 802.3af Power over Ethernet

Accessories

- SFP: S30 Series
- SFP: S20 Series
- NS-CBL-50: Switch Stacking Cable - .5 meters (50cm)
- NS-CBL-200: Switch Stacking Cable - 2 meters (200cm)

Diagram

17.32 in. (440 mm)

11.81 in. (300 mm)

1.75 in. (44.45 mm)
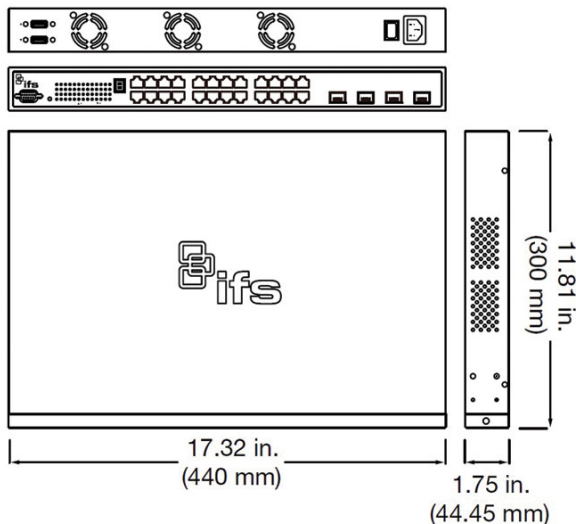
Ordering Information

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UTC Fire & Security

A United Technologies Company