

NS3552-16P-2T-2S

16-Port Industrial Gigabit Managed PoE+ Switch

Overview

The IFS® Industrial Gigabit PoE+ Managed Switch by Interlogix is a fully managed Layer 2 switch providing an industrial hardened design. This design provides for operational recovery in the event of a network or power system failure.

The IFS NS3552-16P-2T-2S is an Industrial Gigabit PoE+ Managed Switch equipped with sixteen 10/100/1000Mbps RJ45 ports with PoE+ (30w) capabilities, two Gigabit RJ45 and two SFP (fiber) uplink ports.

Layer 2+ Managed Switch

The IFS Industrial Gigabit Managed Switch Series supports advanced features including IEEE 802.1Q VLAN, GVRP, port link aggregation, QoS, broadcast storm control and MAC address filtering. The series also includes IGMP snooping and querying multicasting for media operations and bandwidth utilization to fit a variety of applications. Via aggregation of supporting ports, the series allows the operation of high-speed trunk operation combining multiple ports. A maximum of four ports can be assigned for four trunk groups and support fail-over as well. Additionally, its standards-compliant implementation ensures interoperability with equipment from other vendors.

Industrial-grade Network Redundancy and Recovery

These switches not only incorporate the industry standard Rapid Spanning Tree Protocol (IEEE 802.1w RSTP), but also an advanced rapid ring recovery protocol allowing improved network recovery times that are on average less than 20ms for redundant ring topologies. The switches incorporate a redundant power supply system to further enhance network reliability and uptime. Ideal for use in implementing highly fault-tolerant ring and mesh network architectures, these switches are suited for environments such as industrial security, factory automation and intelligent transportation systems (ITS).

Robust Hardened Design

With an IP-30 rated enclosure, IFS Industrial Gigabit Managed Switches provide a high level of immunity against electromagnetic (EMI) and radio-frequency (RFI) interference typically found in industrial environments. This series of switches comply with IEC60068-2-xx standards for free-fall, shock, and vibration and operate in -40° C to 75° C temperatures found in difficult environments such as plant floors or in curbside traffic control cabinets.



Standard Features

- 16-Port 10/100/1000Base-T with PoE+
- 2-Ports 100/1000 RJ45 and 2-ports SFP (fiber) 100/1000Base-X
- High-performance Switch Architecture
- Up to 40Gbps non-blocking switch fabric
- 9K bytes Jumbo frame support
- 8K MAC address table, automatic source address learning and aging
- IGMP (v1/v2/V3) Snooping, up to 255 multicast Groups with IGMP Querier mode support, and MLD (v1/v2) Snooping, up to 255 multicast Groups with MLD Querier mode support
- VLAN Support - up to 255 VLANs groups out of 4094 VLAN IDs, MVR (Multicast VLAN Registration), Voice VLAN, MAC-Based VLAN, Protocol-Based VLAN
- Quality of Service (QoS), 802.1p priority, 802.1Q VLAN tag, DSCP/TOS field in IP Packet
- IEEE 802.3ad LACP / Static Trunk, Supports 5 groups of 8-Port trunk support
- Advanced Security
- MAC Filtering and Source IP/MAC address port-binding
- Complies with IEEE 802.3af / IEEE 802.3at Power over Ethernet
- Circuit protection prevent power interference between ports
- Robust Hardened Design
- IP30 metal enclosure, DIN Rail and Wall Mount Design
- Wide operating temperature range of -40°C ~ +75°C
- Layer-3 Static routing (max 32 routes) and route summarisation
- Supports ERPS (Ethernet Ring Protection Switching)

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Specifications

Category	
Category	Industrial
Management	Managed
PoE	Yes
Managed	Yes
Physical ports	
Speed	Gigabit
No. of ports	16
Port type	Gig
PoE/PoE+	16 port PoE/8 port PoE+
Fiber port	2
SFP speed	100/1000
Supported SFP's	S20/S25 series, S30/S35 series
Switch Performance	
Throughput (Mpps)	29.7
Jumbo frame support	9 K
Switch fabric	40 Gbps
Mac table	8 K
Switch Architecture:	Store-and-Forward
Switch Fabric:	40Gbps non-blocking
Switch Throughput:	29.7Mpps @64Bytes
Mac Address Table:	8K entries
Share Data Buffer:	4Mbit
Jumbo Frame Size:	9Kbytes
Flow Control:	Back pressure for Half-Duplex, IEEE 802.3x Pause Frame for Full-Duplex
Layer 2 Functions	
IGMP snooping	255 Group, Snooping v1, v2, v3
IGMP query	Yes
Access control list	123 entries
Management interface	Console, Web, Telnet, SNMP 1,2,3, SSH/SSL secure access
VLAN, QoS	256, yes
Management Interface:	Console, Telnet, SSH, SSL, 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:	Bandwidth control per port: Ingress: 500Kb~1000Mbps, Egress: 500Kb~1000Mbps
VLAN:	IEEE 802.1q tagged-based VLAN; Port-based VLAN; Q-in-Q tunneling; Up to 255 VLANs groups; Private VLAN, MAC-Based VLAN, Protocol-Based VLAN, Voice VLAN, MVR (Multicast VLAN Registration)
Link Aggregation:	IEEE 802.3ad LACP / Static Trunk, Supports 5 groups of 8-Port trunk support
Quality of Service (QoS):	Traffic classification based, Strict priority and WRR; 8-level priority for switching - Port Number - 802.1p priority - 802.1Q VLAN tag - DS/TOS field in IP Packet
Multicasting/IGMP:	IGMP (v1/v2/v3) Snooping, up to 255 multicast Groups with IGMP Querier mode support, MLD (v1/v2) Snooping, up to 255 multicast Groups with MLD Querier mode support
SNMP MIBs:	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; RFC-2618 RADIUS Client MIB; RFC-2933 IGMP-STD-MIB; RFC3411 SNMP-Frameworks-MIB; IEEE802.1X PAE; LLDP; MAU-MIB
General	
Storm control	Broadcast, Multicast, Unicast
Security	802.1x, RADIUS, Source MAC _i / _i IP address binding, ACL

DHCP s1oping	Yes
Fault relay output	Yes
Physical	
Stackable	No
Physical dimensions	152 x 107 x 84 mm
Net weight	1.533 kg
Mounting type	DIN-rail, Wall mount
Environmental	
Operating temperature	-40 to +75°C
Relative humidity	0 to 95% (non-condensing)
IP-rating	IP30
Operating Temperature:	-40°C to 75°C
Storage Temperature:	-40°C to 85°C
Relative Humidity:	0% to 95% (non-condensing)
Electrical	
Power supply type	52 to 56 VDC
Power consumption	283 W
PoE power budget	260 W
Redundant power	Yes
Standards & regulation	
IEC standard	IEC60068-2-32 (free fall), IEC60068-2-27 (shock), IEC60068-2-6 (vibration)
Physical Ports	
10/100/1000Base-T Ports:	16 RJ-45 POE ports and 2 RJ45 Non-POE Uplink ports
SFP/Mini-GBIC Slots:	2 SFP/Mini-GBIC Slots - 100Base-FX/BX/LX and 1000Base-SX/BX/LX/LHX/ZX SFP transceiver compatible
Port Configuration:	Auto MDI/MDI-X
Port Speed:	Auto-negotiate

Power Over Ethernet Ordering Information

Part No.	Description
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