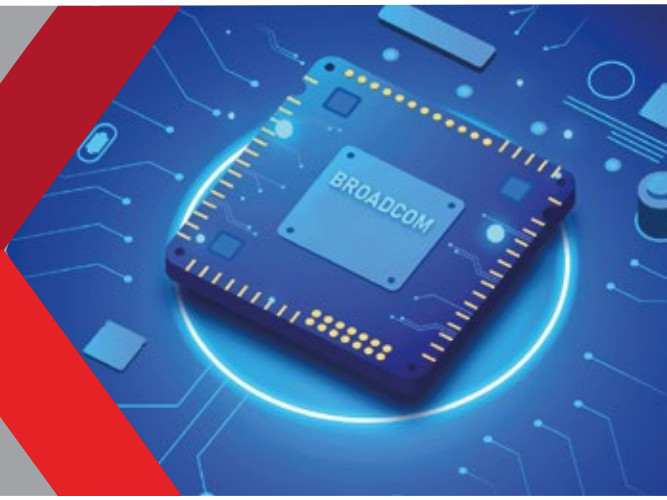
Datasheet

NODEXON
redefining networks

Industrial Switches
NX-IES Series



OVERVIEW

The NX-IES804 - Industrial Ethernet Switch is intended for use in a variety of industrial applications. To cope with severe working conditions, the NX-IES Switch Series includes a wide range of routing, switching, and security protocols, as well as sophisticated features like as vibration resistance, a wide temperature range, dust proofing, and lightning arrester. Another feature that improves network flexibility, robustness, and security is Ethernet Ring Protection Switching (ERPS). Customers can rely on the NX-IES Switch Series for a reliable, secure, and easy-to-use switching infrastructure.

FEATURES HIGHLIGHTS

- 8 10/100/1000BASE-T ports
  4 1000BASE-X SFP ports (100M not supported)
- 802.1X Authentication
- 4K 802.1q VLAN
- SNMPv1/v2c/v3, CLI (Telnet/Console), RMON (1, 2, 3, 9), SSH, Syslog, NTP/SNTP, web
- Support IPv6 ACL and IPv6 QoS basted on source/destination
- MAC Address + Port +IP Address Binding
- MAC Authentication & ACL Delivery <20ms
- 1+1 Power Redundancy

NX-IES804DC - NX-IES804

NX-IES402

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PRODUCT FEATURES

Advanced Hardware Architecture

To fulfill the rigorous needs across industrial networks, the NX-IES Switch Series combines standard industrial chips, a high-performance CPU, and an industrial-grade power module in a robust aluminum chassis. Fanless cooling, -40 to 85°C working temperature range, IP40 protection grade, lightning protection of 6KV, power supply with anti-vibration function, level 4 electromagnetic interference standard, shock and vibration resistance

Abundant Network and Security Features

A large collection of Layer 2 features: VLAN, ERPS, QoS, port security, broadcast storm suppression, and Layer 3 technologies like static routing are all supported. Binding of static and dynamic ports, port isolation, several types of hardware ACL control, bandwidth speed restriction depending on data flow, user access control, and other features are all supported.
Virus assaults, network traffic attacks, and rogue network access are all well protected by the NX-IES Series. Exceptional network stability: The Network Foundation Protection Policy (NFPP) sets a speed restriction based on packet types (management, forwarding, protocol packets, and so on) and attack inspection.
The NX-IES Series provides complete protection against network assaults, maintaining regular forwarding and protocol execution.

Flexible Deployment and Management

Support the classic star network design as well as the Ethernet Ring Protection Switching (ERPS) technology for the best price-to-performance ratio. ERPS allows for the creation of ring network topologies with increased redundancy and dependability. Data can be transmitted from the opposite end if a node in the ring network breaks. The ERPS is more cost-effective since it reduces optical fiber investment costs. Flexible network deployment: Gigabit copper and fiber (non-combo) installations are both supported. Simple to maintain and manage: Syslog is a log management system that allows for centralized log collecting, maintenance, analysis, troubleshooting, and backup.

Typical Application

With up to 8 10/100/1000M copper ports, up to 4 1000BASE-X SFP ports, an operational temperature range of -40 to 85°C, and a power consumption of 12 W, the NX-IES Industrial Switch Series is specialized for the Citywide IP Surveillance Integrated Network and Monitoring Solution.
The switch is equipped with Ethernet Ring Protection Switching (ERPS), which improves network stability and flexibility to fulfill the needs of city-wide IP surveillance, intelligent transportation outside surveillance, and surveillance deployment in hostile environments.

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TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-IES804DC	NX-IES804	NX-IES402
Ports	8 10/100/1000BASE-T ports 4 1000BASE-X SFP ports (100M not supported)	8 10/100/1000BASE-T ports 4 1000BASE-X SFP ports (100M not supported)	4 10/100/1000BASE-T ports 2 1000BASE-X SFP ports (100M not supported)
Management Ports	1 Console Port		
802.1q VLAN	4K		
Packet Forwarding Rate	26.7Mpps	26.7Mpps	18Gbps
Switching Capacity	36Gbps	36Gbps	13.4Mpps
Protection Rating	IP40		
MTBF	>30 years		
Operating Temperature	-40 to 85°C		
Operating Humidity	5 to 95%RH		
Electromagnetic Interference	ESD (IEC 61000-4-2) RS (IEC 61000-4-3) EFT (IEC 61000-4-4) CS (IEC 61000-4-6) PFMF (IEC 61000-4-8) Surge (IEC 61000-4-5) DIP (IEC 61000-4-11)	Level 4 (8K/15K) Level 3 (10V/m) Level 3 (1V/2V) Level 3 (10V/m) Level 4 (30A/m) Level 4+ (6KV/2KV) Level3 (10V)	Level 4 (8K/15K) Level 3 (10V/m) Level 3 (1V/2V) Level 3 (10V/m) Level 4 (30A/m) Level 4+ (6KV/2KV) Level3 (10V)
ACL	Standard IP ACL (hardware ACL based on IP address), Extended IP ACL (hardware ACL based on IP address and TCP/UDP port number), Extended MAC ACL (hardware ACL based on source MAC address, destination, MAC address and optional Ethernet type), Time-based ACL, Expert ACL (hardware ACL based on flexible combination of VLAN number, Ethernet type, MAC address, IP address, TCP/UDP port number, protocol type, time, etc.)		
L2 Protocols	G.8032 (ERPS), IEEE802.1ag, IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x, IEEE802.3ad, IEEE802.1p, IEEE802.1x, IEEE802.3ab, IEEE802.1Q, IEEE802.1d, IEEE802.1w, IEEE802.1s, IGMP Snooping v1/v2/v3		
Security	Binding of IP, MAC and port, Binding of IPv6, MAC and port, Filter rogue MAC address MAC-based and port-based 802.1x, Web authentication and concurrent 802.1x, ARP-Check and ACL ARP-Check, DAI, Speed limit on packet transmission, Broadcast storm suppression Administrator hierarchy and password protection, AAA authentication for device login management (IPv4/IPv6), SSH, BPDU Guard		
IPv6 ACL & QoS	Support IPv6 ACL and IPv6 QoS based on source/destination IPv6 address and port Priority queue: 8		
IP Routing	Default routing, static routing between host and directly connected network segments		
IPv6 Protocols	IPv6 address assignment, Neighbor Discovery (ND), ICMPv6, IPv6 Ping, IPv6 Tracert		

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Management	SNMPv1/v2c/v3, CLI (Telnet/Console), RMON (1, 2, 3, 9), SSH, Syslog, NTP/ SNTP, web		
Emission Standards	EN 300 386, EN 55032, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN, 61000-4-11		
Dimensions	52 x 115 x 160mm		
Installation Mode	DIN rail-mounted		
Heat Dissipation	Fanless design with high-efficiency heat sink		
Power Supply	DC input: Rated voltage: 24VDC, 48VDC Maximum voltage range: 18VDC to 72VDC Maximum current: 1.0A Two power supplies are supported for 1+1 power redundancy.	AC Input: Nominal voltage range: 100-240V Max voltage range: 90-264V Frequency: 50-60Hz Rated current: 0.4A HVDC input: Rated voltage range: 140VDC to 340VDC Maximum voltage range: 130VDC to 370VDC Rated current: 0.4A	
Safety Standards	N/A	IEC 60950-1,EN60950-1	

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