

## OverView

**NW-ISM-16TX-C** 16-port managed industrial Fast Ethernet switch designed for mission-critical applications. This rugged switch features fanless cooling, wide operating temperature (-40°C to +75°C), and high protection level, delivering exceptional resistance to extreme temperatures and lightning strikes (8-15KV ESD). Equipped with advanced switching protocols and ERPS (Ethernet Ring Protection Switching), it ensures network redundancy and millisecond-level recovery for uninterrupted operation in harsh industrial environments.

## Applications

- Railways: Metro/train communication
- Smart Cities: Surveillance & traffic networks
- Traffic Systems: Roadside control
- Outdoor Sites: Weatherproof monitoring
- · Factories: Industrial automation networks

#### Features

- 12-58V DC Input
- -40°C to +75°C Operation
- IP40 Fanless Design
- RoHS/FCC/CE Certified
- 8-15KV ESD Protection
- 100K Hours MTBF

### NW-ISM-16TX-C

L2+ Managed Industrial Ethernet Switches





Dimensions



## Specifications

Provider Mode Ports		
Fixed port	16*10/100 Base-T	
Management Port	Support Console	
Power interface	Phoenix terminal, dual power input	
LED Indicators	PWR, Link/ACT LED	
Cable Type & Transmission Distance		
Twisted-pair	0-100m (CAT5e,CAT6)	





Specifications	
	Network Topology
Ring topology	Support
Star topology	Support
Bus topology	Support
Tree Topology	Support
Hybrid topology	Support
	Electrical Specifications
	DC12 50V
Tatal Dama conception	
Iotal Power consumption	Total power<10w
	Management
CLI	Support
Console	Support
Management IP	Support IPv4/IPv6
Telnet/SSH	Support
WEB management	Support
SNMP	Support SNMPv1/v2c/v3
User Management	Support
User Rights Management	Support
System Log	Support
Configuration File Download/Upload	Support
Ungrade Firmware	Support





	Environment	
Operating temperature	-40°C~+75°C	
Storage temperature	-40°C~+85°C	
	5% = 0.05% (non-condensing)	
Thermal methods	Same solution condensing	
i nermai metnods	Faniess, natural cooling	
MIBF	100,000 nours	
	PoE Support (optional)	
PoE port	1-8	
PoE Protocol	802.3af, 802.3at	
Pin Assignment	1,2+,3,6-	
PoE Management	Support	
	Layer 2 Switching	
Switching capacity	5.20	

Packet forwarding rate	2.38 Mpps
MAC address table	8К
Buffer	4.1M
Forwarding delay	<10us
MDI/MDIX	Support
VLAN	1,2+,256 个-
GVRP	Support
Protocol VLAN	Support
Voice VLAN	Support
Surveillance VLAN	Support





# Specifications

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MAC VLAN	Support
Ether channle/ 802 .3ad	Support
LACP	Support
Interface Speed	Support
Duplex Mode	Support
Flow Control	Support
Jumbo frame	Support
DHCP Client	Support
SNTP Client	Support
Port Statistics	Support
Protected Ports	Support
EEE	Support
Ring Protocol	Support
LLDP	Support
Spanning Tree	Support STP/RSTP/MSTP
STP BPDU Filter	Support
STP BPDU guard	Support
STP Port Fast	Support
IGMP Snooping	Support
MLD Snooping	Support
MVR	Support
DHCP interface prioritizes IP binding	Support
Device scanning	Support





# Specifications

#### layer 3 function

IPV4 management address	Support
IPV6 management address	Support
Static Routes IPv4	Supports 32 items
Static Routes IPv6	Supports 32 items
ARP	Support
Loopback Interface	Support
DHCP Server	Support
DNS Server	Support

#### **Mechanical Dimensions**

# Product size144\*104\*48mmInstallation MethodDIN-railWeight0.6KG

#### **EMC&INGRESS PROTECTION**

Surge protection of Power	Common mode 4KV, differential mode 2KV
Surge protection of Ethernet port	Common mode 4KV, differential mode 2KV
ESD	Exposure to 8K, air at 15K
Free fall	0.5m
IP Level	IP40





#### Convergence

ACL	Support MAC standard/extended ACL Support IPV4 standard/extended ACL Support IPV6 standard/extended ACL Support L4 layer ACL
QoS	Support QoS re tagging Support port trust Support port speed limit Support export queue speed limit Support SP and WRR scheduling algorithms Support COS mapping, DSCP mapping, IP priority mapping
Manage channel configuration	Support
AAA certification	Support
802.1X authentication	Support
MAC Based Authentication	Support
WEB Based Authentication	Support
DoS attack prevention	Support
Dynamic ARP Check	Support
DHCP Snooping	Support





# Specifications

#### **Equipment diagnosis**

RAM log	Support
Flash logs	Support
Port Mirror	Support
Ping	Support
Traceroute	Support
Electrical interface testing	Support
Optical module information	Support
UDLD protocol	Support

## **Standards Compliance**

Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x flow control and back pressure IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.1Q VLAN tagging IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.1ag Connectivity Fault Management(CFM) RFC 1112IGMP v1 RFC 2236 IGMP v2 RFC 3376IGMP v3 RFC783 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 2068 HTTP RFC 2616 HTTPS ITU-T G.8032 ERPS Ring
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Specifications	
	Authentication
Authentication	CE/FCC/RoHS
	Accessories
Accessories	Device, Terminals, Specification, Certificate Adapter(optional)
	Optional model
NW-ISM-16TX-C	1610/100M electrical ports



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