EX70900 系列

IEC 61850-3/IEEE 1613 強固級網管型8埠Gigabit乙太網路交換器



產品介紹

本產品自 2020年5月26日起停產。 請點選 此處 尋找替代產品。

EX70900系列為一款full Gigabit網管型乙太網路交換器，內建6個10/100/1000BASE-TX+2個SFP埠。具備完整管理功能，包含port security、IGMP snooping、VLANs、GARP協定、LACP；使用者可透過網頁瀏覽telnet、SNMP、RMON、TFTP和RS-232 console 管理介面，使複雜的專案規劃事半功倍。

EX70900系列專為嚴峻戶外環境設計打造，鋁軌式安裝設計、工業等級設計且符合IEC 61850標準，同時可在高EMI環境及-40 到 75°C 寬溫環境下穩定運作，於嚴峻的專案規劃佈局中扮演致勝的關鍵角色。

EtherWAN — "When Connectivity is Crucial."

產品亮點

Full Gigabit連接埠

» 提供8個Gigabit埠，支援多元介面組合：copper、SC、ST或 LC

智慧化管理功能

» 完整的網路管理效能：QoS, VLAN

通過IEC 61850-3/IEEE 1613標準

» 符合電廠認證標準，可應用於高EMI環境架構

符合Energy Efficient Ethernet (EEE)

» 符合IEEE 802.3az標準

產品特色

Management

» Interface
  • CLI, Telnet and Web Browser
  • SNMP v1/v2c/v3
» Firmware and configuration upgrade and backup via TFTP
» Supports DHCP Server/Client
» RMON (Remote monitoring): group 1, 2, 3, 9
» Port mirroring: TX/RX and both
» SFP transceivers support Digital Diagnostics Monitoring (DDM)
» NTP (Network Time Protocol) time synchronization
» IEEE 802.1ab LLDP (Link Layer Discovery Protocol)

Security

» MAC address filtering
  • Enable/disable port
» Storm control (broadcast and multicast types)
» IEEE 802.1x LAN access control
» Remote authentication through RADIUS
» SSH for CLI and Telnet security
» SSL for web security
» Multi-level user account/password against unauthorized configuration
» System log (remote/local)

Quality of Service (QoS)

» Priority Queues: 4 queues per port
» Traffic classification based on IEEE 802.1p CoS, DSCP, WRR (Weighted round robin) and strict mode
» Rate Limiting (Ingress/Egress)

Layer 2 Features

» Auto-negotiation for port speed and duplex mode
» Flow Control
  • IEEE 802.3x full duplex mode
  • Back-Pressure half duplex mode
» Redundant Protocol
  • IEEE 802.1D Spanning Tree Protocol (STP)
  • IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

» VLANs
- Port-based VLANs
- IEEE 802.1Q Tag VLANs (128 groups, 4096 VID)
- GVRP (GARP VLAN Registration Protocol)
- GMRP (GARP Multicast Registration Protocol)

» Link Aggregation
- Static Trunk (2 groups, support MAC base)
- IEEE 802.3ad Link Aggregation Control Protocol

» IGMP Snooping
- IGMP snooping v1/v2/v3

Performance

» Switching Capability: 16Gbps
» Packet Buffer Size: 1.5M bits
» MAC Address Table: 4K

產品規格

技術

標準

• IEEE 802.3 10BASE-T
• IEEE 802.3u 100BASE-TX/100BASE-FX
• IEEE 802.3ab 1000BASE-T
• IEEE 802.3az EEE
• IEEE 802.3z 1000BASE-SX/1000BASE-LX
• IEEE 802.3x Full duplex and flow control
• IEEE 802.1p QoS
• IEEE 802.1Q Tag VLANs
• IEEE 802.1w RSTP
• IEEE 802.1x Port-based Network Access Control

Forward and Filtering Rate

• 14,880pps for 10Mbps
• 148,810pps for 100Mbps
• 1,488,100pps for 1000Mbps

緩衝記憶體封包

• 1.5M bits

傳輸型式

• Store-and-Forward
• Half-duplex back-pressure and IEEE 802.3x full-duplex flow control

巨大封包

• 9720 bytes

MAC地址表

• 4096 MAC addresses

電源

輸入電壓

• Redundant power inputs:
  12-48VDC (Terminal Block)
  12VDC (DC Jack)

電力功耗

• 10.2W Max., 0.85A@12VDC

Protection

• Reverse polarity protection

機構

機殼

• Aluminum Case
• IP30

尺寸

• 66 x 125 x 145mm (W x D x H)
(2.64" x 4.92" x 5.7")

重量

• 1.1Kg (2.42lbs.)

安裝方式

• DIN-Rail (Top hat type35mm) or Wall mounting

介面

乙太網路埠

• 10/100/1000BASE-TX: 8, 7, or 6 ports
• 1000BASE-SX/LX/SFP: 0, 1, or 2 ports

Console Port

• Port: One DB9 RS-232 port

LED 指示燈號

• Per Unit: Power Status (Power 1, Power 2, Power 3), Alarm
• Per Port: Link/Activity

Alarm Contact

• One relay output with current 1A@24VDC

環境

工作溫度

• -40 to 75°C (14 to 167°F)
Tested @ -40 to 85°C(-40 to 185°F)

儲存溫度

• -40 to 85°C (-40 to 185°F)

工作濕度

• 5% to 95% (無凝結)

通過認證

ISO

• Manufactured in an ISO 9001 facility

Safety

UL 508

EMI

FCC Part 15B Class A
EN 61000-6-4
EN 61000-3-2
EN 61000-3-3

EMS

EN 61000-6-2
• EN 61000-4-2 (ESD Standards)
• EN 61000-4-3 (Radiated RFI Standards)
• EN 61000-4-4 (Burst Standards)
• EN 61000-4-5 (Surge Standards)
• EN 61000-4-6 (Induced RFI Standards)
• EN 61000-4-8 (Magnetic Field Standards)

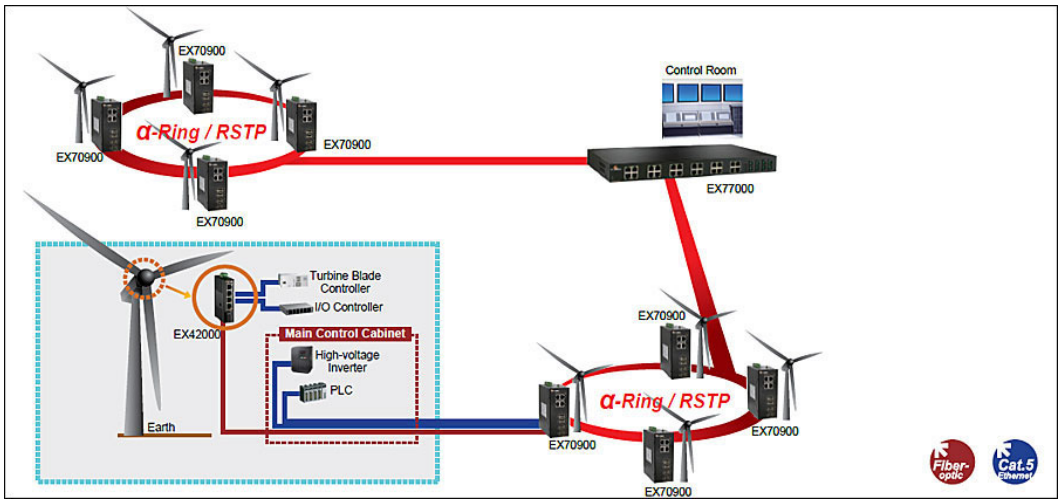
Environmental Test Compliance

IEC 60068-2-6 Fc (Vibration Resistance)
FED STD 101C Method 5007.1 (Free fall w/package)

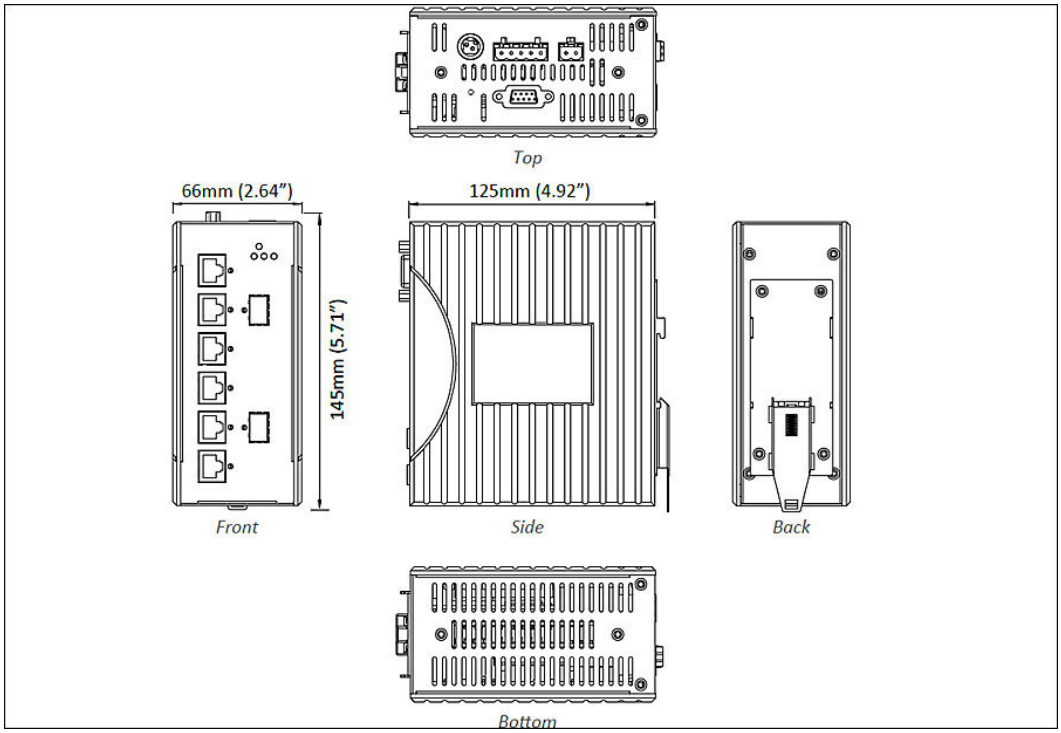
Industrial Compliance

IEC 61850-3/IEEE 1613
EN 50121-4

產品應用圖


EX70900
α-Ring / RSTP
EX70900
EX70900
EX70900
Control Room
EX77000
Turbine Blade Controller
I/O Controller
EX42000
Main Control Cabinet
High-voltage Inverter
PLC
Earth
EX70900
α-Ring / RSTP
EX70900
EX70900
EX70900
Fiber-optic
Cat.5 Ethernet

產品尺寸圖


Top
66mm (2.64")
125mm (4.92")
145mm (5.71")
Front
Side
Back
Bottom

訂購型號

型號

EX70980-00B	8-Port 10/100/1000BASE-TX Managed Hardened Ethernet Switch
EX70971-0VB	7-Port 10/100/1000BASE-TX +1-Port Gigabit SFP Hardened Managed Ethernet Switch
EX70962-0VB	6-Port 10/100/1000BASE-TX +2-Port Gigabit SFP Hardened Managed Ethernet Switch
EX70962-0XB	6-Port 10/100/1000BASE-TX +2-Port Gigabit Fiber Hardened Managed Ethernet Switch

* DIN-Rail mounting kit included.

Gigabit Port Options (X)

3	1000BASE-SX (SC) - 550m
4	1000BASE-SX (SC) - 2Km
5	1000BASE-SX (ST) - 550m
A	1000BASE-LX (SC) - 10Km
B	1000BASE-LX (SC) - 20Km
R	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
S	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km

* More Gigabit options are also available upon request.

Optional Accessories

HDR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
HDR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
EX41-145046-X	Power Supply 45W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA
EX41-145044-X	Power Supply 45W 12VDC with Latch (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA

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