

## Managed Industrial Ethernet Switch



AVAILABLE FROM NEPEAN ELECTRONICS

IES7110-2GS-P 2 Gigabit SFP + 8 100M copper ports 12~48VDC

NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

IES7110 series are 10-port 100M/gigabit layer 2 managed industrial Ethernet switches. This series include five types of products and provide 100M copper ports, 100M fiber ports, gigabit copper ports and gigabit SFP slots, and adopt DIN-Rail or wall mounting which can meet the requirements of different scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on. Moreover, it supports CLI, WEB, Telnet, SNMP and other access modes. It can provide users with good experience via friendly design of network management system interface, simple and convenient operation.

The input power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. DIP switch can instantly restore factory defaults. When power supply or port has link failure, ALARM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting.

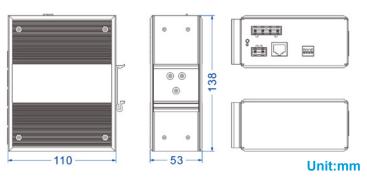
Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. Designed for smart grid, railway transportation, smart city, safe city, new energy, aerospace, intelligent manufacturing, military project and other industrial fields.

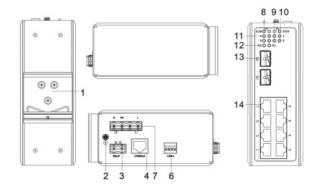
#### **Features and Benefits**

- SNMPv1/v2c is used for network management of various levels
- · Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- · QoS supports real-time traffic classification and priority setting
- File management is convenient for rapid configuration and online upgrade of the device
- Port statistics can be used for the port real time traffic statistics
- User password can conduct user hierarchical management to improve the device administrative security
- · Relay alarm is convenient for troubleshooting of construction site
- Storm suppression can restrain broadcast, unknown multicast and unknown unicast
- · VLAN can simplify the network planning
- Port trunking can increase network bandwidth and the reliability of network connection to achieve optimal bandwidth utilization
- Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- IGMP-snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring and STP/RSTP can achieve network redundancy, preventing network storm

## **Managed Ethernet Industrial Switch**

#### **Diagram**





- 1. DIN-Rail mounting kit
- 2. Grounding screw
- 3. Relay alarm output terminal block
- 4. Console port
- 5. DC dual power supply input terminal block
- 6. DIP switch
- 7. AC single power supply input terminal block
- 8. Relay alarm indicator ALM/Alarm
- 9. Power supply input status indicator P1/P2/PWR
- 10. Device running indicator RUN
- 11. 100M Ethernet port connection indicator
- 12. Gigabit Ethernet port connection indicator
- 13. 1000Base-SFP Ethernet SFP slot
- 14. 10/100Base-TX Ethernet copper port

#### **Ordering Information**

Part Number	Description
IES7110-2GS	Managed Switch 2*1000M SFP(SFP slot) +8*10/100Baes-T(X) (RJ45), 12~48VDC
SW3825DI-442	Transceiver module SFP 1.25Gb/s LC Connector, 20km

### **Specifications**

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS		
Management	SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, DHCP Client, File Management, Port Statistics		
Security	Classification of User Permissions, Port Alarm and Power Supply Alarm		
<b>Switch Function</b>	802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control		
Unicast/ Multicast	Static Multicast , IGMP-Snooping		
Redundancy Protocol	SW-Ring, STP/RSTP		
Interface	100M copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning 100M fiber port: 100Base-FX, SC/ST/FC optional SFP slot: 1000Base-SFP Console port: CLI command line management port (RS-232), RJ45 Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output		
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator		

# **Managed Ethernet Industrial Switch**

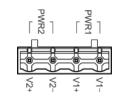
## **Specifications continued**

	MAC address: 8K Packet buffer size: 1Mbit Backplane bandwidth: 7.6G Switch time delay: <10µs				
	12~48VDC, 4-pin 7.62mm pitch terminal blocks dual power supply redundancy, non-polarity, reverse connection protection				
ower Consumption	Model	No-Load (@24VDC)	Full-Load(@24VDC)		
	IES7110-2GS-2F	5.08W	7.49W		
	IES7110-2GS-4F	6.14W	9.05W		
	IES7110-3GS	2.62W	7.18W		
	IES7110-2GS*	2.23W	5.49W		
	IES7110-3GT *Stocked	4.15W	9.24W		
	Operating temperature range: -40~75°C Storage temperature range: -40~85°C Relative humidity: 5%~95% (no condensation)				
	Housing: IP40 protection, metal Installation: DIN-Rail mounting or wall mounting Dimension (W x H x D): 53mm×138mm×110mm Weight: ≤790g				
	IEC 61000-4-2 (ESD), Level 4  Air discharge: ±15kV  Contact discharge: ±8kV IEC 61000-4-4 (EFT), Level 4  Power supply: ±4kV  Ethernet port: ±2kV  Relay: ±4kV IEC 61000-4-5 (Surge), Level 4 (excludes IES7110-3GS)  Power supply: common mode±4kV, differential mode±2kV  Ethernet port: ±2kV  Relay: common mode±4kV, differential mode±2kV  IEC 61000-4-5 (Surge), Level 3 (IES7110-3GS)  Power supply: common mode±2kV, differential mode±1kV  Ethernet port: ±2kV  Relay: common mode±2kV, differential mode±1kV  Ethernet port: ±2kV  Relay: common mode±2kV, differential mode±1kV  Shock: IEC 60068-2-27  Free fall: IEC 60068-2-32  Vibration: IEC 60068-2-6				

## **Power Supply Connection**

#### **DC Dual Power Supply**

The products of model II, model VI, model VII and model VIII support DC dual power supply.



And they provide 4 pins power input terminal blocks and two independent DC power supply systems of PWR1 and PWR2. The power supply supports nonpolarity and anti-reverse connection. It can normally operate after reverse connection. Power supply range: 12~48VDC