

# **INS-8622P**

# Managed Industrial PoE Plus Ethernet Switch

2-port IEEE 802.3at PoE Plus + 2-slot Gigabit SFP

#### Description

The INS-8622P managed industrial switch is a Power Source Equipment (PSE) device engineered with rugged hardware to meet the high reliability requirements of Industrial or Outdoor PoE applications. Built in a well-protected IP-30 aluminium housing, the switch withstands wide operating temperatures ranging from -40°C to 75°C and operates consistently even in harsh industrial environments. The INS-8622P supports QoS, IGMP snooping, SFP DDMI, PoE and other device management features to fulfill the needs of high performance managed surveillance networks.

PoE+ function on 2-10/100/1000 copper ports of the INS-8622P complies with IEEE 802.3at standards and allows them to supply up to 30W per port for network attached powered devices such as WLAN Access Points, VoIP phones and IP surveillance cameras. Two gigabit fiber slots can be configured as dual fiber ring ports to quickly recover network failures and provide an easy way to establish redundant gigabit network. Thus, INS-8622P ensures a reliable and highly available managed industrial networks while delivering all the benefits of PoE power.



RoHS (€ ®













## **Features Highlight**

#### **Robust Performance and Protection**

Well-protected in an IP-30 aluminium casing, the switch provides high level of immunity against EMI and EMS found in industrial environments. Along with those, the INS-8622P is built with various protection features such as ESD Protection (8KV), Surge Protection (6KV), Over Voltage/Current Protection, Reverse Polarity Protection and Short Circuit Protection to ensure continuous operation of mission-critical applications even in unstable power conditions.



## **High-Power Budget for PoE Network Devices**

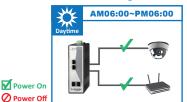
To fulfill the growing demand of high-bandwidth, high-power PoE+ for network applications and eliminating the cost of electrical cabling and circuits, the INS-8622P is designed under IEEE 802.3at standard PoE plus. With 60W PoE power budget capability for the whole system, the switch allows simple "plug and play" PoE for various types of high power consuming PoE devices. This makes the INS-8622P a very convenient solution for applications far away from power outlets satisfying PoE extension applications in much longer distances.



#### **Innovative PoE+ for Powered Devices**

The INS-8622P is designed with intelligent PoE+ features to utilize power more efficiently. With user-configurable power budget limit feature, the switch limits power output to devices to ensure that power consumption does not exceed user defined parameters. And to monitor real-time status of PDs, the switch sends alive-checking packets to PDs. This reduces management burden and increases system reliability. Using power scheduling mechanism of the switch, administrators can set power on each port to a desired hourly/weekly schedule and can enable or disable the power output to these devices accordingly.

#### **PoE Scheduling**





# **PoE Alive-Checking**







## **Features Highlight**

## DIN Rail to Power Adapter (AC to DC) & Terminal Block

The INS-8622P is an ideal solution to prevent the failure of single power circuits, which provide power redundant options to facilitate high power PoE+ usage. Either "DIN-Rail Power Adapter" to convert AC to DC for board operation in an easily and firmly installation with hardened connection, or "6-pin Terminal Block" which supports primary and secondary power input. Categorized by its compact design, DIN-Rail Power Adapter can easily fit in smaller infrastructures and is an extremely simple installation. Saving your time and space, this adapter can be easily DIN-Rail-mounted next to INS-8622P in surveillance applications that have little space available.



#### **Redundant and Resilient Network with Dual SFP Ports**

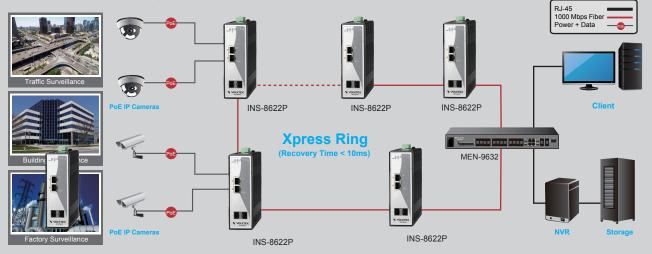
The INS-8622P incorporates two gigabit fiber slots which can be configured as ring ports to provide link redundancy in fiber based ring architecture networks, or daisy chain to extend distance in surveillance systems. Dual homing increases your network uptime with its two independent uplink paths. When primary link fails, the backup link is activated to keep your network always available. In addition, Xpress ring feature of the switch rapidly reacts to link failures and recovers it within 10ms, a much faster fail-over time to support nonstop transmission.

# Efficient network monitoring and proactive capability

The INS-8622P supports the most accepted and enhanced traffic management, monitoring and analysis protocols such as SNMP and RMON. SNMPv1/v2c allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. In addition, QoS, IGMP and VLAN give the capability to monitor the network performance for powered devices in surveillance applications. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

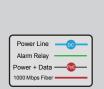
#### **Surveillance Applications**

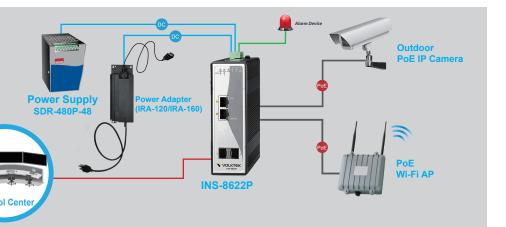
The INS-8622P combines high-power PoE+, robust performance for surveillance systems in harsh industrial environments. With small size, highly reliable and secure features ensure continuous operations in some special requirements for transportation, factory and outdoor places where high vibration degree, shock and wide range temperatures are present.



#### **Applications**

The INS-8622P is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy surveillance networking requirements.







# Specifications

Standards	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX
IEEE 802.3ab	1000Base-T
IEEE 802.3z	1000Base-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.1p	Class of Service
IEEE 802.1g	VLAN Tagging
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.3af	PoE
IEEE 802.3at	PoE plus
Network Manageme	
	Command Line Interface, Telnet, Web GUI, Syslog
Configuration	SNMP v1/v1c, Management VLAN, SNTP, Firmware
	Upgradable, Configuration Upload/Download
VLAN	IEEE 802.1Q Tag-based VLAN, Port Isolation
Traffic Control &	IGMP snooping, QoS, Rate Limitation, Storm Control,
Network Redundancy	Port Isolation, Dual Homing, Xpress Ring
Diagnostics	LED status, SNMP trap, E-mail alarm, SFP DDMI,
gcoco	Port Mirroring, RMON, Port Statistic, IPv6.
Power	3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Power Input Voltage	Primary: 48V (48~57V DC)
Input Voltage	Primary: 48V (48~57V DC)  Redundant: 48V (48~57V DC)
	Primary: 48V (48~57V DC)  Redundant: 48V (48~57V DC)  4-pin DC-Jack (Primary Power Input)
Input Voltage  Connection	Primary: 48V (48~57V DC)  Redundant: 48V (48~57V DC)
Input Voltage  Connection  Power Input Polarity Protection	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present
Input Voltage  Connection	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input
Input Voltage  Connection  Power Input Polarity Protection  Power Voltage Drop Alarm  Alarm Relay	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present
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Input Voltage  Connection  Power Input Polarity Protection  Power Voltage Drop Alarm  Alarm Relay  Power Consumption	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded)
Input Voltage  Connection  Power Input Polarity Protection  Power Voltage Drop Alarm  Alarm Relay  Power Consumption  Surge Protection	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground)
Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground)
Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground) 8KV/15KV (Contact/Air)
Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection PoE+ Functions	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground) 8KV/15KV (Contact/Air) Up to 2 IEEE 802.3at powered devices
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Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection PoE+ Functions	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground) 8KV/15KV (Contact/Air)  Up to 2 IEEE 802.3at powered devices Supports PoE Power up to 30W for each PoE port Auto detect powered device (PD)
Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection PoE+ Functions  PoE+ Functions  Interface	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground) 8KV/15KV (Contact/Air)  Up to 2 IEEE 802.3at powered devices Supports PoE Power up to 30W for each PoE port Auto detect powered device (PD)
Input Voltage  Connection  Power Input Polarity Protection Power Voltage Drop Alarm Alarm Relay Power Consumption  Surge Protection ESD Protection PoE+ Functions  PoE+ Functions	Primary: 48V (48~57V DC) Redundant: 48V (48~57V DC) 4-pin DC-Jack (Primary Power Input) 6-pin Terminal block (Primary/Redundant Power Input) Present Primary/Redundant Power Input One relay output with current carrying capacity of 1A @ 24V DC 8W (System) 70W (with 2 PoE plus fully loaded) 6KV (Line-to-Ground) 8KV/15KV (Contact/Air)  Up to 2 IEEE 802.3at powered devices Supports PoE Power up to 30W for each PoE port Auto detect powered device (PD) Remote Power feeding up to 100m

<sup>\*</sup>Industrial SFP with wide operating temperature (-40°C~85°C) is available upon request \*Specifications subject to change without notice.

Mechanical and Environment
Housing Aluminum Case (IP30 protection)
Mounting DIN-Rail, Wall Mount (Optional)
Operating Temperature -40°C~75°C
Storage Temperature -40°C~85°C
Operating Humidity 10 to 95% RH (non-condensing)
Storage Humidity 5 to 95% RH (non-condensing)
Weight 529g
<b>Dimension (WxHxD)</b> 50x155.15x119.9 mm (1.97x6.10x4.71inch)
DIP Switch Primary/Redundant Power Voltage Drop Alarm set
LED Panel PWR, RPS, ALM, SFP slots, PoE ports, 1000, LNK/A
Standards and Certifications
Safety EN60950
FCC Part 15 Subpart B Class A
EMI EN55022 class A
EN 55024
IEC/EN 61000-4-2 (ESD): Level 3
CE IEC/EN 61000-4-3 (RS): Level 3
EMS IEC/EN 61000-4-4 (EFT): Level 3
IEC/EN 61000-4-5 (Surge): Level 3
IEC/EN 61000-4-6 (CS): Level 3
IEC/EN 61000-4-8 (PFMF): Level 3
Approval & Test
Shock IEC 60068-2-27 (Processing)
Freefall IEC 60068-2-32 (Processing)
Vibration IEC 60068-2-6 (Processing)
Ordering Information
INS-8622P Managed Industrial 2-port IEEE 802.3af/at PoE+
+ 2-slot Gigabit SFP Ethernet PoE Switch
Optional Accessories
SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power
Power Supply Supply, -25°C~70°C
IRA-120: 120W, 52V, Industrial Grade Power Adapter (-30°C~6
Power Adapter for 110V AC input / -30°C~70°C for 220V AC input)
IRA-160: 160W, 52V, Industrial Grade Power Adapter (-30°C~6
for 110V AC input / -30°C~70°C for 220V AC input)
DIN Rail/Wall Mount Holder DR-120 (for IRA-120) / DR-160 (for IRA-160)
MEN-9632 Managed 24-slot 100FX/GbE SFP, 4G Combo Aggregation Sv
<b>GBM-104</b> 1000Base-SX 1.25G, Multi-mode SFP, 500m
<b>GBM-104-2</b> 1000Base-SX 1.25G, Multi-mode, 3.3V, 1310nm, 2Km
<b>GBM-104-10</b> 1000Base-LX 1.25G, Single mode SFP, 10Km
GBM-123 1000Base-LX Bi-di Single Mode SFP Module, 10Km

## Dimension

