

# Industrial 8-Port 10/100TX M12 802.3at PoE+ Switch (-40~75 degrees C)



## Reliable Data and Power over Ethernet

PLANET ISW-808PT-M12A is an industrial-grade robust and vibration-proof PoE+ switch for a wide range of applications in factories or moving trains as it guarantees a reliable performance under vibration and shock. It features **eight 10/100BASE-TX** auto-negotiation **dustproof M12** connectors with **IEEE 802.3at PoE+ injector** function; each PoE+ port provides **36 watts** of PoE output. The M12 connector provides tight and strong connection, and ensures stable Ethernet operating performance withstanding humidity, dirt, dust, shock, vibrations, heat and cold. The compact, IP50-rated metal case of the ISW-808PT-M12A allows either DIN-rail or wall mounting for efficient use of cabinet space.



## Environmentally-hardened Design

Being able to operate under the temperature range from **-40 to 75 degrees C**, the ISW-808PT-M12A, equipped with a tough IP50-rated industrial case, provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb-side traffic control cabinets. It ensures the highest level of reliability for mission-critical applications in any difficult environment.

## Convenient and Reliable Power System

To facilitate the 802.3at PoE usage with commonly-used 12~54V DC power input for transportation and industrial-level applications, the ISW-808PT-M12A adopts the 12~54V DC to 54V power boost technology to solve power source issue but does not require special power supplies. Its wide-ranging voltages design is suitable for worldwide operability with high availability applications requiring dual or backup power inputs.

## Physical Port

- 8-port 10/100BASE-TX with dustproof M12 connectors and IEEE 802.3at PoE+ injector function

## Power over Ethernet

- Its end-span PSE complies with IEEE 802.3at Power over Ethernet Plus.
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 8 ports of IEEE 802.3af/802.3at devices powered
- 180-watt PoE budget
- Supports PoE power up to 36 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters

## Layer 2 Features

- Supports auto-negotiation and 10/100Mbps half/full duplex mode
- High-performance Store and Forward architecture; runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Backplane (switching fabric): 1.6Gbps
- Integrated address look-up engine, supporting 2K absolute MAC addresses
- Automatic address learning and address aging
- CSMA/CD Protocol

## Industrial Case and Installation

- IP50 metal case
- Dustproof and fanless designs
- DIN-rail and wall-mount installation
- Redundant power design
  - 12 to 54V DC, redundant power with reverse polarity protection
  - Active-active redundant power failure protection
  - Backup of catastrophic power failure on one supply
  - Fault tolerance and resilience
- Supports 6KV DC Ethernet ESD protection
- Supports 6KV surge protection
- -40 to 75 degrees C operating temperature

### Intelligent LED Indicator for Real-time PoE Usage

The ISW-808PT-M12A helps users to monitor current status of PoE power usage easily and efficiently by its advanced LED indication. Called “PoE Power Usage”, the front panel of the ISW-808PT-M12A has three orange LEDs indicating 60W, 120W and 180W of PoE power usage.

### High Performance

The ISW-808PT-M12A has 2K MAC address table and offers wire-speed packets transfer performance without the risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit environments. With a 1.6Gbps internal switching fabric and featuring auto negotiation support in each Fast Ethernet port, the ISW-808PT-M12A can handle large amounts of data in a secure topology linking to a backbone or high capacity servers.

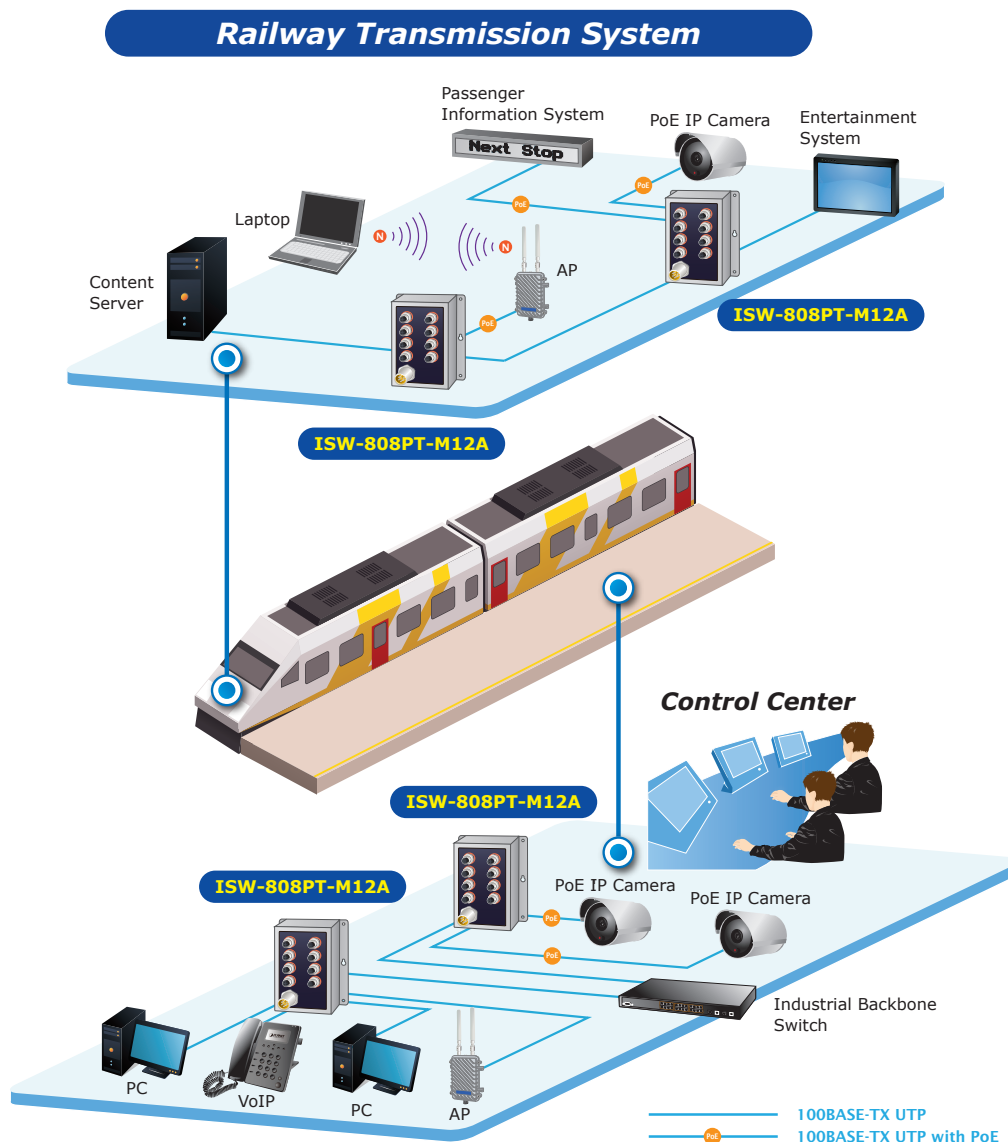
### Easy Installation

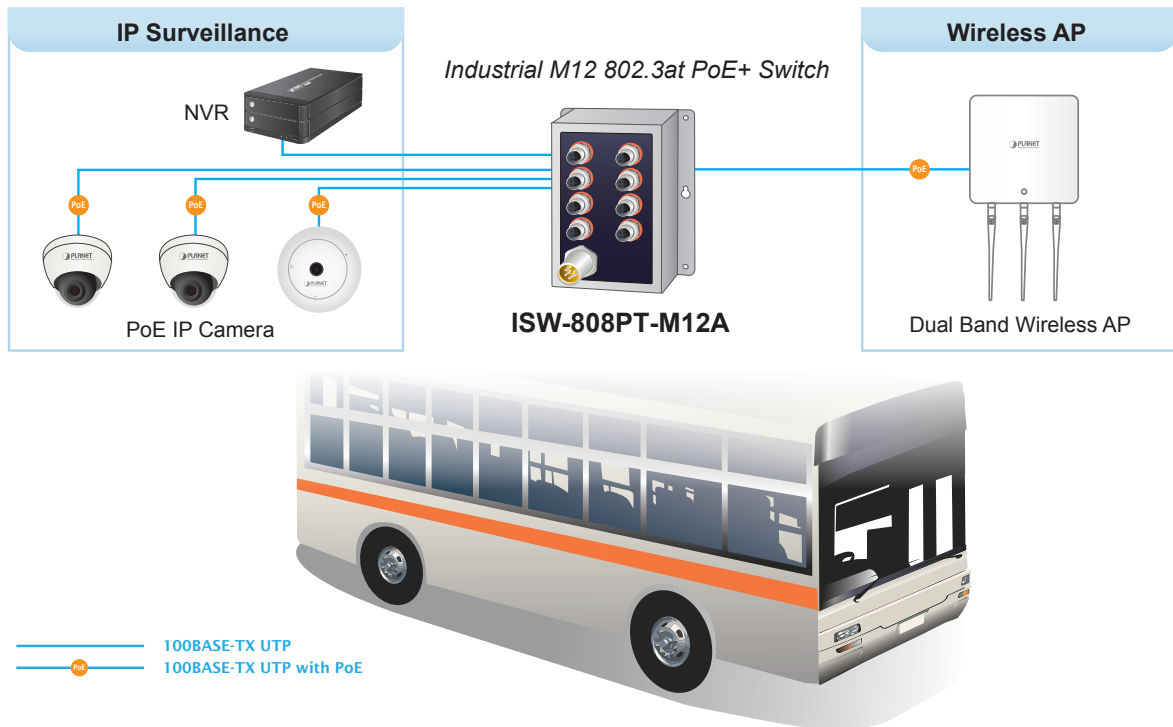
The flow control function enables the ISW-808PT-M12A to provide fast and reliable data transfer. All of the M12 RJ45 copper interfaces in the ISW-808PT-M12A support 10/100Mbps auto-negotiation for optimal speed detection through RJ45 Category 3, 4, 5, 5e, 6 cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

## Applications

### ITS Industrial Ethernet PoE Solution

The ISW-808PT-M12A's vibration-proof and shockproof features guarantee stable operation, even in moving vehicles, trains and other public transportation systems, making it an ideal solution for intelligent transportation systems. To facilitate the 802.3at PoE usage with commonly-used 12~54V DC power input for transportation and industrial-level applications, the ISW-808PT-M12A adopts the 12~54V DC to 54V power boost technology to solve power source issue but does not require special power supplies. It certainly meets the transmission needs of power and data for surveillance system, video transmission and wireless service on the bus, shuttle and other vehicles.





#### Public Construction for Data Collection and Forwarding

Providing up to 8 PoE+, in-line power interfaces, the ISW-808PT-M12A can easily build a power centrally controlled by IP phone system, IP camera system, or wireless AP group for Industrial network. For instance, 8 PoE IP cameras or wireless access points can be easily installed around the corner in the industrial environment for surveillance demands or for a wireless roaming network. Without the power-socket limitation, the ISW-808PT-M12A makes the installation of IP cameras or wireless AP easier and more efficient.

