EtherWAN

EX78900X series

Agenda

1. Product Overview

2. Features

3. Application

4. Ordering Information

EX78900X series - Overview

Hardened Lite Layer 3 Managed 16-port Gigabit PoE Ethernet Switch

- **High speed data transmission**
  - Full Gigabit bandwidth on all RJ45 ports
  - Dual rate 1/10Gigabit connectivity on all SFP fiber ports

- **High power PoE**
  - IEEE 802.3bt compliance, PoE 90W per port with total power budget 360 Watts
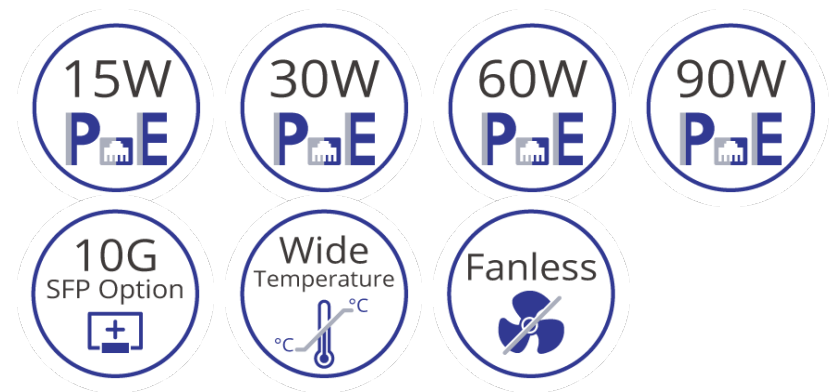
- **Technical enhancement**
  - SFP ports
    - Support Power level III (2 watts) SFP transceiver
    - Support Digital Diagnostics Monitoring (DDM)
  - Storm detection and control
  - PoE DI (Digital Input)

- **Lite Layer 3 functionality**
  - VRRP, OSFP, RIPv1/v2, Static routing

- **Rugged design for harsh environments**
  - Wide operating temperature -40~75°C
  - 6Kv surge protection on PoE

EX78900X series - Outlook

Dimensions: 72mm (W) x 170mm (H) x 140mm (D)

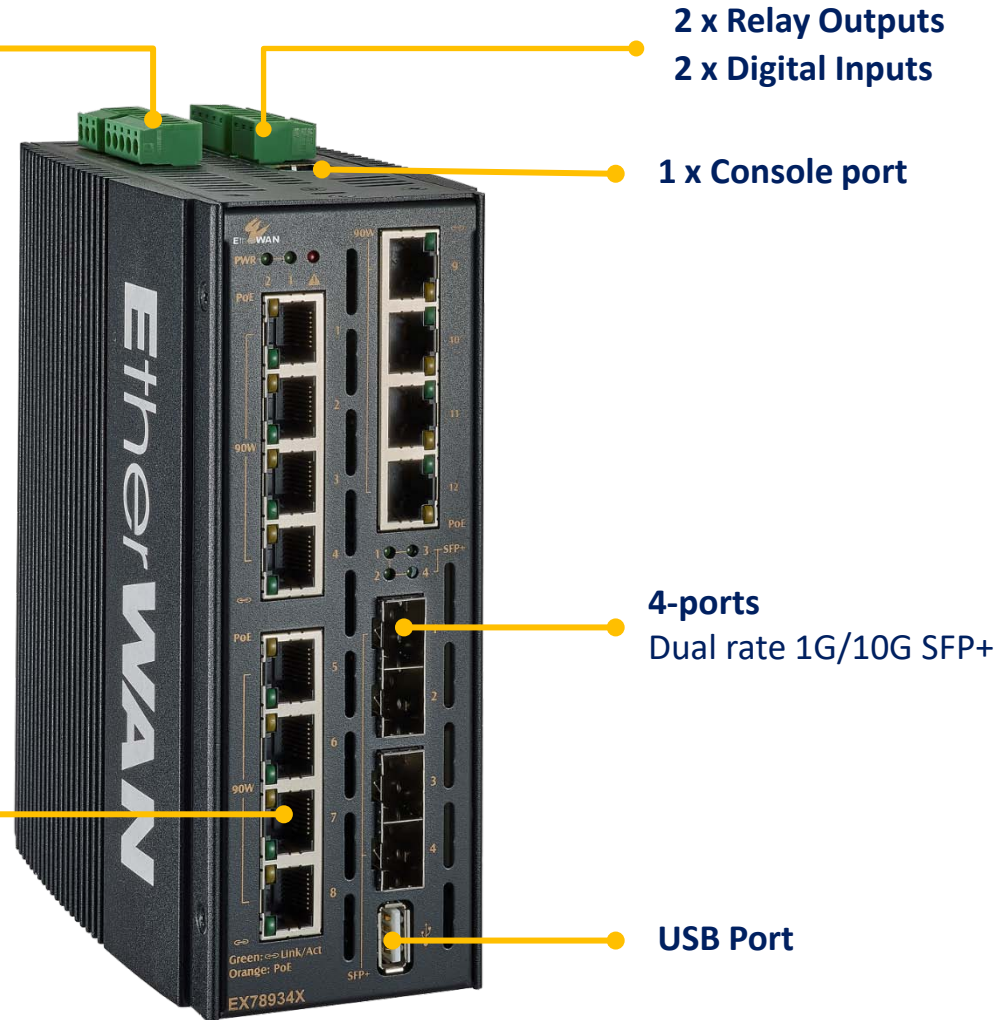**EtherWAN**

Redundant Power Input
52-57 V DC

2 x Relay Outputs
2 x Digital Inputs

1 x Console port

12-ports
10/100/1000BASE-T(X)
with IEEE 802.3bt 90W PoE

4-ports
Dual rate 1G/10G SFP+

USB Port

EX78900X series - Key features

☑ **IEEE 802.3bt 90W high power PoE**

☑ **Built-in EtherWAN intelligent PoE feature set**

☑ **Technical enhancement**
  - Supports Power level III (2 watts) SFP transceiver
  - Supports Digital Diagnostics Monitoring (DDM)
  - Storm detection and control

☑ **Integrated with EtherWAN DnA solution**

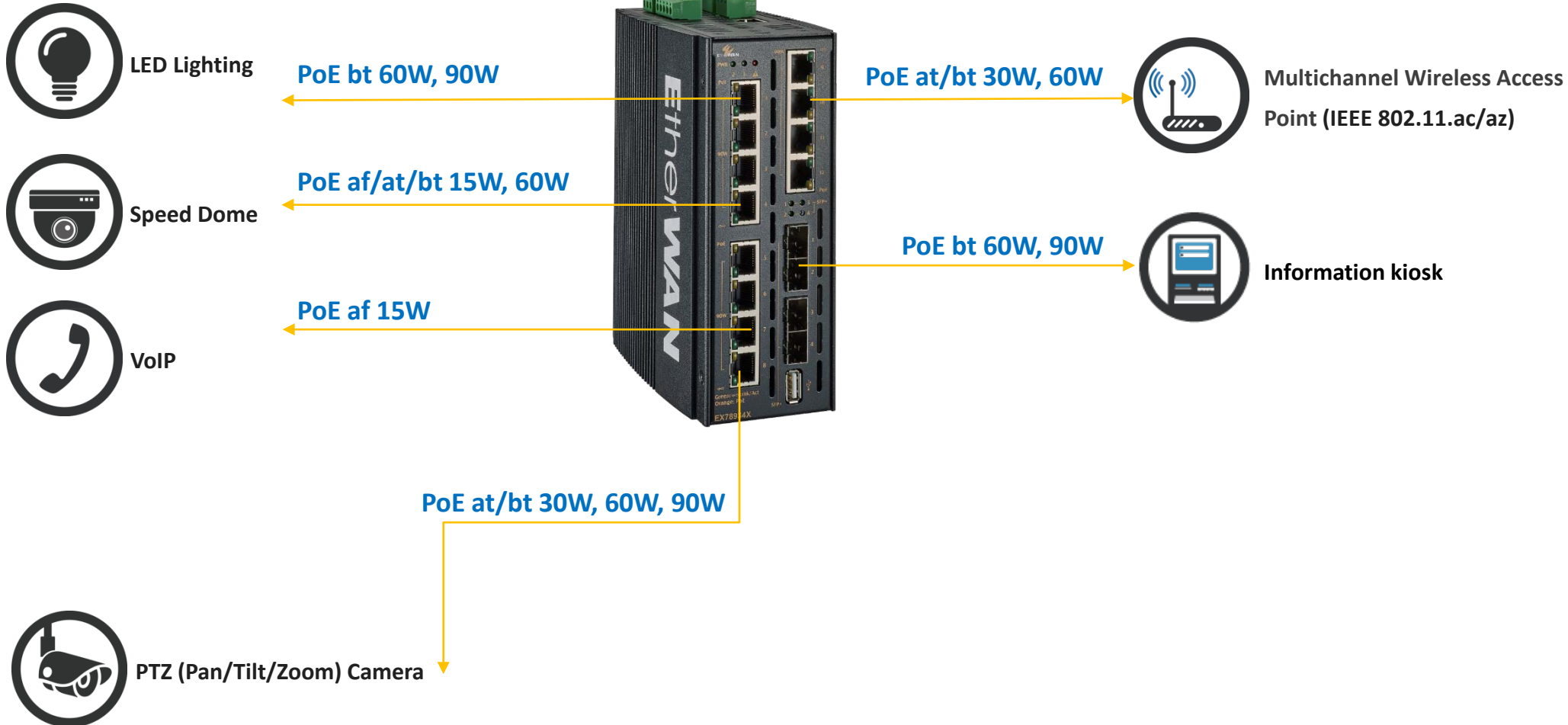# EX78900X series - Key features introduction
IEEE 802.3bt 90W high power PoE

- Compliance with IEEE 802.3af/at/bt standard: Extend power capability to Type 4

Type			PSE Class		PD Class	
4			90W		71W	
4			75W		62W	
3			60W		51W	
3			45W		40W	
3	2		30W		25W	
3			15W		13W	
3	1		7W		6.5W	
3			4W		3.5W	

802.3bt

802.3at

802.3af

EX78900X series - Key features introduction

EX78900X delivers high power PoE to various PoE-PD endpoints

LED Lighting — PoE bt 60W, 90W

Speed Dome — PoE af/at/bt 15W, 60W

VoIP — PoE af 15W

PTZ (Pan/Tilt/Zoom) Camera — PoE at/bt 30W, 60W, 90W

Multichannel Wireless Access Point (IEEE 802.11.ac/az) — PoE at/bt 30W, 60W

Information kiosk — PoE bt 60W, 90W

EX78900X series - Key features introduction

PoE Scheduling

PoE Scheduling allows PoE ports to have their power up time scheduled by hour of the day and day of the week.
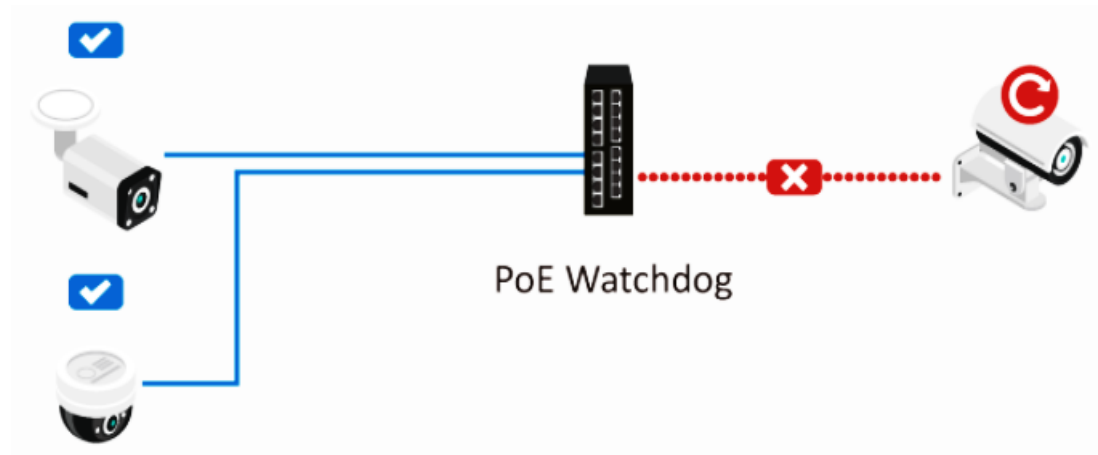
PoE Per Port Scheduling		
Port: fe1 ▾	Status: Not Scheduled	
Ti	Sun	Mon
fe1		
fe2		
00 fe3		
01 fe4		
fe5		
02 fe6		
03 fe7		
fe8		
04:00		
05:00		

PoE Watchdog

Automatically check and reboot PD when camera does not respond, allowing the administrator to reduce urgency and frequency of troubleshooting.

PoE Watchdog

EX78900X series - Key features introduction
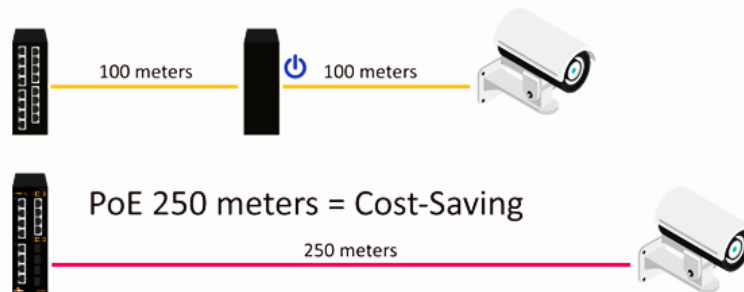EtherWAN intelligent PoE feature set

An embedded 6kV surge protection can protect against electronic interference. Each copper port can endure a 6kV surge and protect the equipment at standard deployments.

Shield Twisted Pair cable

6Kv Surge Immunity

PoE 250m

When Extend Mode is enabled, a single PoE port can support a transmission distance of 250 meters* with ease-of-use and cost-savings.

100 meters — 100 meters

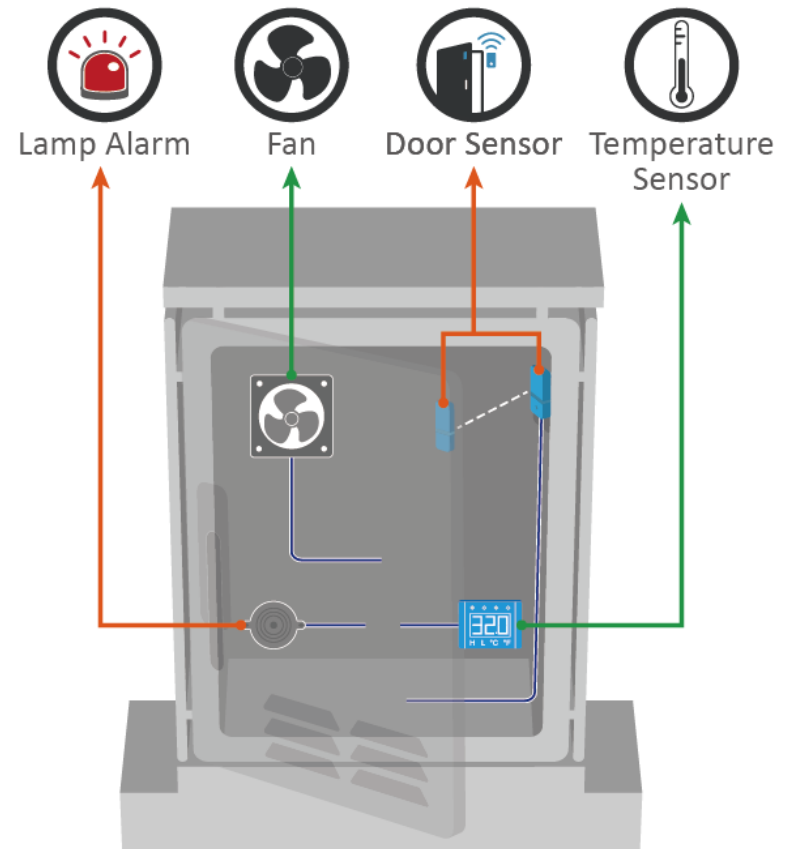PoE 250 meters = Cost-Saving

250 meters

*It is suggested to pre-test the function before deployment. The maximum available transmission distance of PoE depends on the negotiation result of PD and PSE. Some PDs using EtherWAN PoE/PSE switches may only support a standard distance of 100 meters. Contact EtherWAN if assistance is needed.

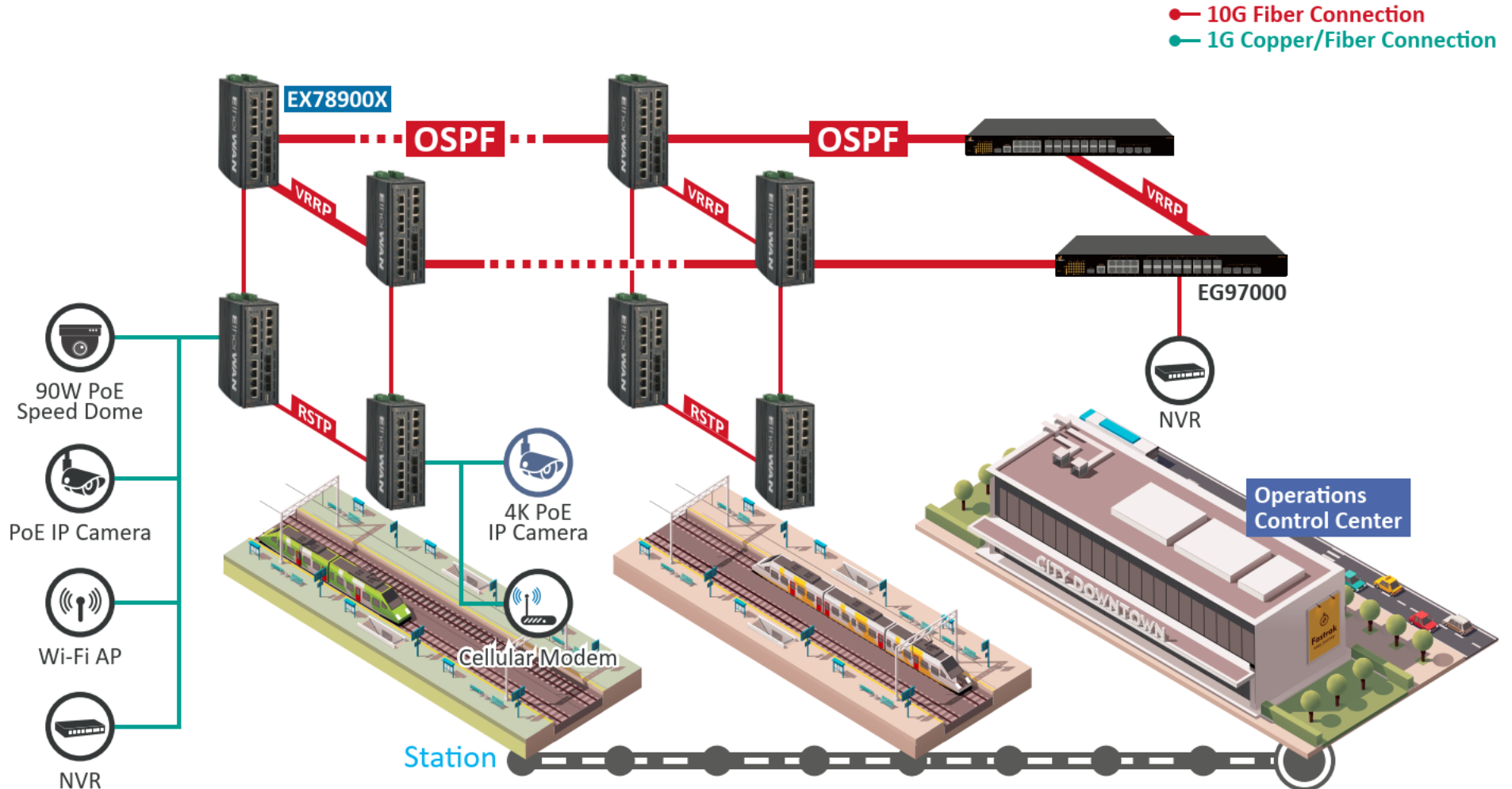# EX78900X series - Key features introduction

Detect and Alert (DnA) solution

Integrated with 2 x Digital Inputs and 2 x Relay Output interfaces for intelligent alarm system & notification

Lamp Alarm   Fan   Door Sensor   Temperature Sensor

EX78900X series - Application

10G Fiber Connection
1G Copper/Fiber Connection

EX78900X

OSPF · OSPF · OSPF · OSPF

VRRP · VRRP · VRRP

RSTP · RSTP

EG97000

NVR

90W PoE
Speed Dome

PoE IP Camera

Wi-Fi AP

NVR

4K PoE
IP Camera

Cellular Modem

Station

Operations
Control Center

CITY DOWNTOWN

EX78900X series - Ordering information

☑ **Model**

– **EX78934X:**

12-port 10/100/1000BASE-T(X) with 90W PoE + 4-port 1G/10G SFP+

☑ **Accessories**

– DIN-Rail power supplies

– Gigabit SFP modules

– 10 Gigabit SFP modules

*SFP selection guide is online now! Check **HERE**

☑ **Management support tools**

– Configuration Backup and Restoration Tool: **EB-232**

– Network management software: **eVue, eLite**