

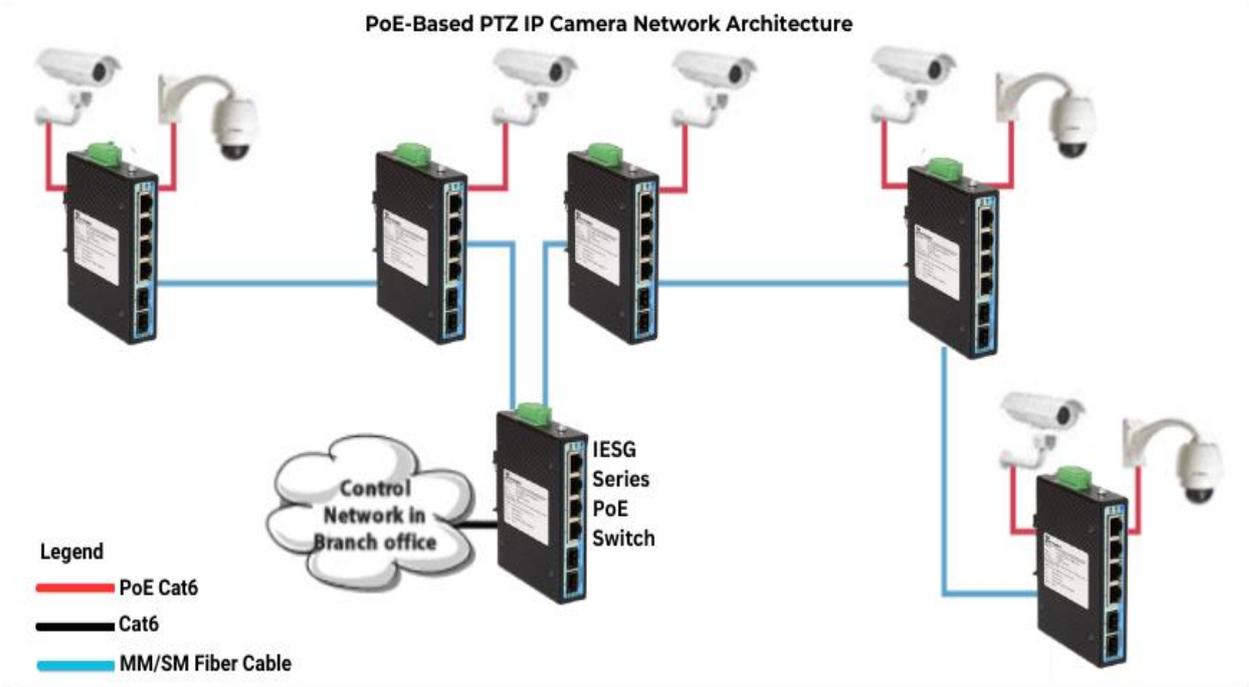
# Application Note for Unmanaged Industrial PoE Ethernet Switch

## Introduction

The Unmanaged Gigabit PoE Ethernet Switch is a high-performance industrial networking solution designed to simplify deployment of PoE-powered devices such as PTZ IP cameras, wireless access points, and access control systems. By delivering both power and Gigabit data over a single Ethernet cable, it reduces installation cost, wiring complexity, and deployment time. Its rugged industrial design ensures reliable operation in harsh and mission-critical environments.

## System Architecture Overview

### Application Diagram:



## Diagram Explanation

The diagram demonstrates a scalable PoE surveillance network where unmanaged Gigabit PoE Ethernet switches power and connect PTZ IP cameras using PoE Cat6 cables. Multiple switches are interconnected using high-speed Gigabit copper and MM/SM fiber links, enabling long-distance communication without performance loss. A centralized control network at the branch office allows seamless monitoring, recording, and management of video streams. This architecture delivers high bandwidth, stable connectivity, and easy expansion, making it ideal for large-scale deployments.

## Additional Devices That Can Be Connected

The Unmanaged Gigabit PoE Ethernet Switch supports a wide range of PoE and Ethernet devices, including:

- PTZ and fixed IP cameras
- Network Video Recorders (NVR)
- Wireless access points
- Industrial PCs and servers
- Access control and intercom systems
- VoIP phones
- Industrial gateways and media converters

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## Typical Applications

This network architecture is commonly used in:

- Factory automation systems
- Smart city and traffic monitoring systems
- Factory, warehouse, and campus security
- Power substations and utility sites
- Oil & gas and mining facilities
- Transportation infrastructure and public spaces

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## Summary

The Unmanaged Gigabit PoE Ethernet Switch offers a simple, reliable, and cost-effective networking solution for industrial PoE applications. With plug-and-play installation, Gigabit performance, and integrated PoE power delivery, it minimizes infrastructure costs while ensuring dependable operation. This makes it the perfect choice for customers seeking fast deployment, high reliability, and scalable PoE network expansion.