Thermal + PTZ Camera Tracking Solution for Long Perimeter Protection

HIKVISION

Pain Points

Dead Zones in Long Perimeter Monitoring

Monitoring dead zones existed in the long perimeter of the power station, factory, etc., which may cause intrusion events by suspicious targets.

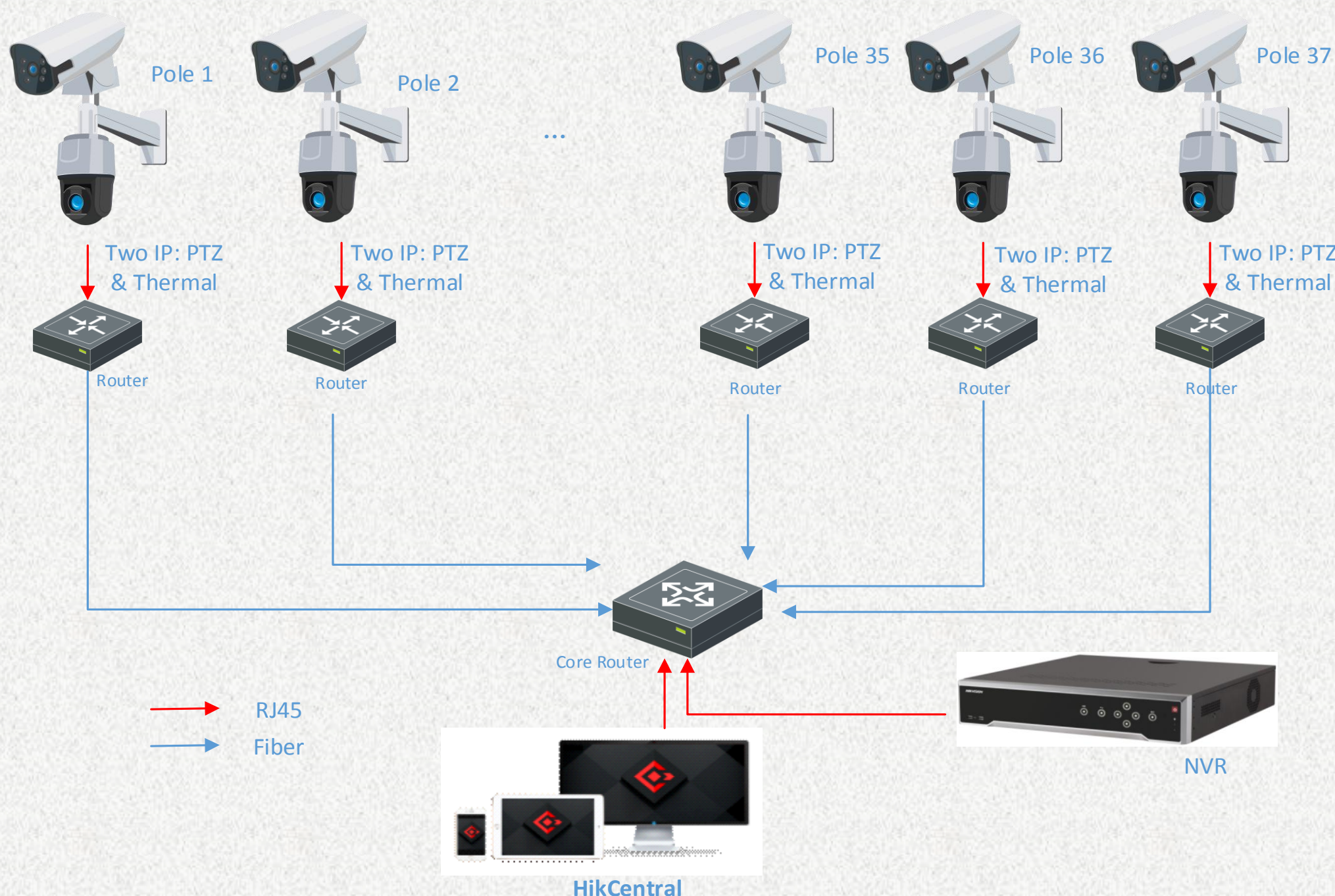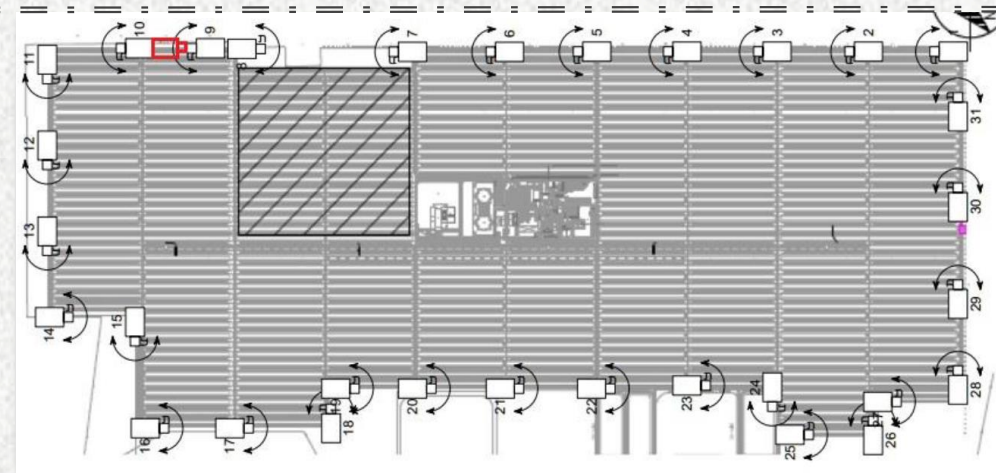**Frequently Triggered False Alarms**

Frequent false alarms may be triggered, especially in the far distance, such as the moving animals, shaking of poles, plastic bags, etc.

Low Performance in Night or Poor Environments

Failed to detect the suspects hidden in the grass and trees, or in poor environment conditions (darkness, fog, haze, etc.).

Solution Architecture

Pole 1 — Two IP: PTZ & Thermal — Router

Pole 2 — Two IP: PTZ & Thermal — Router

Pole 35 — Two IP: PTZ & Thermal — Router

Pole 36 — Two IP: PTZ & Thermal — Router

Pole 37 — Two IP: PTZ & Thermal — Router

Core Router

→ RJ45
→ Fiber

NVR

HikCentral

Solution Highlights

☐ **Thermal + PTZ Camera Linkage Tracking**

- When detecting the moving target, the thermal camera links the PTZ camera to track the suspicious target in real time.
- Easy to detect suspects and hidden objects in the trees, grass, or in the darkness, fog surroundings, etc.

☐ **Tracking Priority Level Configurable**

- The regional intrusion and line crossing detection can be configured with different priority levels of areas or lines.
- When the PTZ camera is already in tracking mode while the thermal camera detects a target entering the area/line with higher priority level, then the PTZ camera will turn to track the higher priority target.

☐ **Higher Alarm Accuracy with Filtering Rules**

- Effectively enhance the alarm accuracy by adopting the new filtering rules in intrusion and line crossing detection: real size filtering for objects in near distance and pixel filtering for objects in far distance.

☐ **Longer Detection Distance**

- Each thermal camera reaches up to 300m detection distance.
- Reduce costs and facilitate the installation with few devices needed.

Product Showcase

◆ **DS-2TD2136-35/V1 Thermal Network Bullet Camera**

- Resolution: 384×288/640×512, 17um;
- Focal length: 7mm/10mm/15mm/25mm/35mm;
- VCA distance (human): 70m/100m/150m/250m/350m;
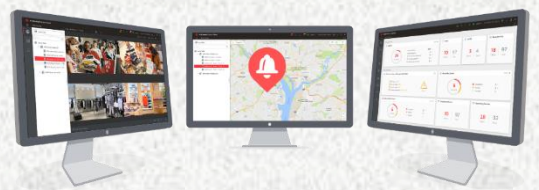- Equipped with build-in GPU

◆ **DS-2DF8250I8X-AEL Network Laser Speed Dome**

- 1/2.8" Progressive Scan CMOS
- Up to 1920 × 1080 resolution
- 120dB WDR, 3D DNR, HLC, BLC
- Up to 800 m laser distance
- Deep-learning-based target classification algorithm for auto-tracking 2.0 and perimeter protection

◆ **DS-9600NI-I8 NVR**

- 16-ch @ 1080p
- Max. 12 MP camera access
- H.265/H.265+
- Dual-stream recording
- Up to eight 10 TB HDDs connectable

◆ **HikCentral Management Software**

- Central management of devices
- Live view and playback
- Health status monitoring
- Receive analysis data and generate intelligent business reports

Success Cases

Ashalim–Thermo-solar power plant in the Negev desert near Ashalim village. This innovative technological production plant is the largest renewable energy project in Israel, with a protected perimeter of 10 km.

The project adopted the Hikvision thermal cameras and PTZ cameras for the perimeter protection and received high satisfaction from customers.