PureTech SYSTEMS®

[DETECT] [VERIFY] [DETER]

Automated Perimeter Protection Solutions for

UTILITIES & CRITICAL INFRASTRUCTURE

Using AI Deep Learning
Geospatial Video Analytics

CONTACT US:

2038 W. Lone Cactus Dr.
Phoenix, AZ 85027
(602) 424-9842
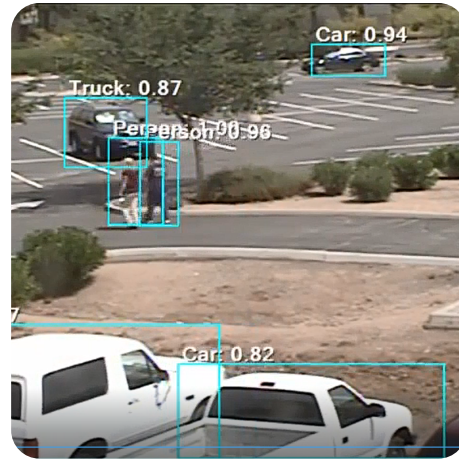info@puretechsystems.com
www.puretechsystems.com

Superior

PERIMETER INTRUSION DETECTION

PureTech's PureActiv wide area and perimeter protection solutions helps utilities improve the safety and security of generation and distribution facilities and assets with a tangible Return on Investment. PureTech's wide-area perimeter protection solutions automate the protection of land and water-side perimeters to help ensure the safety and security of personnel and critical assets.

By detecting intrusion events at the perimeter, before they result in more catastrophic events, loss of life, and operational downtime, utility authorities and law enforcement can intervene to deescalate situations and quickly return to normal operations. The PureActiv system provides detection, alerting, and proactive deterring of potential safety and security events, which helps protect lives and critical assets. Additionally, PureTech's solutions include and combine integrations with other sensor systems to provide the most effective and affordable safety and security solutions. The solutions scale incrementally so that you only pay for the capabilities you need when you need them.

Why choose PureTech?

- 16 years of field operations,
- Among highest probability of detection,
- Auto-detection and auto-verify up to 2km,
- Deep Learning resulting in near-zero nuisance alarm rates,
- Live intruder and event locations displayed on GIS map,
- Automatic drone dispatch to alarm locations for birds-eye live view.
- Available for fixed and rapid deploy mobile (truck or trailer) deployments, and
- PTZ lock on target tracking.

KEY INTEGRATIONS

- Market leading VMS and PSIM systems minimizes IT changes and training,
- Multiple sensor technologies (radar, fiberoptic sensors, etc.) for the most cost-effective detection coverage,
- Loud hailers and spotlight/lighting systems to deter people from perimeters,
- GPS for blue-force tracking (people, land and sea vehicles),
- License Plate Recognition Systems, and
- Integrates with new and existing cameras, systems and sensors to minimize deployment costs and extend the lifecycle of current systems.

Diverse Detection Capabilities

- Object left behind,
- Removed Object,
- Tailgating,
- Piggybacking,
- Counting,
- Zone Entry/Exit,
- Stopping,
- Loitering,
- Crowding,
- Walking,
- Runing,
- Travel Path,
- Long & short-range crawling,
- Perimeter Breach,
- Unauthorized water vessels in secure water areas,
- Persons in unauthorized areas, and
- Wrong direction of travel.

How it works

Unverified motion/events
(99% nuisance)

- Video Motion,
- Fence Sensors,
- Radars,
- Access Control, and
- Ground Sensors.

PureActiv AI Edge Device or Server

- Auto-Verify,
- PTZ Auto-Follow, and
- Deterrent (Sound & Lights).

Verified Alarms
95%+ Accuracy

- PureActiv Alertview,
- Milestone,
- Genetec, and
- Most other VMS's.
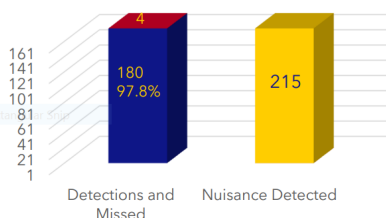
Real-Time
AUTO-VERIFICATION

PureActiv drastically reduces nuisance alarms and related time and operational costs.

When tested, PureTech's Geospatial Video Analytics, boosted with its Deep Learning Auto-verify, resulted in a 99.5% reduction in nuisance alarms while maintaining a superiorly high probability of detection.

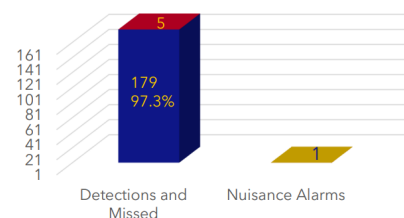*Real- world example of nuisance alarm elimination using samples of 178 actual alarm videos.

Without PureActiv Deep Learning

4
180
97.8%
215

Detections and Missed | Nuisance Detected

Adding Deep Learning Classification to Sophisticated Image Processing Pipeline

With PureActiv Deep Learning

5
179
97.3%
1

Detections and Missed | Nuisance Alarms

Need a
Rapid-Deploy Solution

: 0.85   Person: PersoPers30A: 0.59

Airports   Borders   Military Bases   Seaports   Rapid Transit   Utilities

PureActiv Rapid-Deploy Autonomous Perimeter Surveillance System (R-DAPSS)

The PureActiv R-DAPSS provides the same best-in-class level of perimeter intrusion detection, auto-verification, and automated deterrence as a hard wired-solution. Security and facility managers can now secure their perimeters quickly without planning and executing a large construction project.

- Autonomous sealed virtual perimeter,
- Enhanced with PureActiv® AI Video Analytics,
- Among highest probability of detection,
- Near-zero nuisance alarms,
- Rapid Installation,
- Scalable to small and large sites,
- Permanent or Relocatable,
- Automatically tracks, classifies, and alerts only on objects of interest,
- Less than half the cost and time of hard-wired solutions,
- Optional light and noise deterrents and,
- Eco friendly solar power with backup generator.

Get in touch now for information   sales@puretechystems.com