

PureActiv® for Borders

INTELLIGENT VIDEO AND SENSOR CONTROL

Controlling national borders or large critical perimeters is an important part of national and private security. The ability to monitor a vast amount of area in varied weather conditions and terrain, while accurately identifying potential threats at great distances is a complicated scenario. The solution calls for knowledgeable personnel and accurate sensors that work together to quickly assess a situation and react to it.

GEOSPATIAL COMMAND & CONTROL

PureActiv® uses geospatial (GIS map-based) map technology to display camera locations, their field-of-views, other detection devices, alarm events, and target tracks. In addition to live and recorded video, the user interface includes map tools such as the ability to add and share place-markers, point-and-click on the map to steer cameras to geolocations, range-to-target indicator, and a distance measuring tool. This combination of real-time data on a map-based interface, provides the user a high level of situational awareness.

LONG RANGE, LOCATION-BASED VIDEO ANALYTICS

PureActiv's unparalleled geospatial technology is uniquely aligned for border protection based on its' ability to detect, classify and track targets at long range and in harsh border terrain environment. PureTech's geospatial video analytics outperform other analytics in detection range, probability of detection (PD) and nuisance alarm rate (NAR). Its multistage processing pipeline includes image stabilization, shadow removal, multimodal background learning, segmentation, object recognition, classification and tracking. In addition to its patented PTZ auto-tracking which enables PTZ cameras to automatically follow detected targets, border applications include algorithms to account for thermal induced tower deflection and curvature of the earth compensation.

PureActiv's map-based user interface provides ease of operation and advanced wide-area situational awareness. The solution

excels at providing border agencies and security professionals with a comprehensive birds-eye view and management of their security situation.

PureTech
SYSTEMS®

[DETECT] [ANALYZE] [RESPOND]



LONG RANGE DETECTION

- Location-Based Video Analytics
- Video Detection, Classification & Tracking
- Continuous Slew-to-Cue: Radar, UGS, GPS
- Long Range Camera Auto Tracking
- Precision Camera Control
- Real Size, Real Speed
- Tower Deflection / Curvature Algorithms
- Forensic Video Analysis

COMMAND AND CONTROL

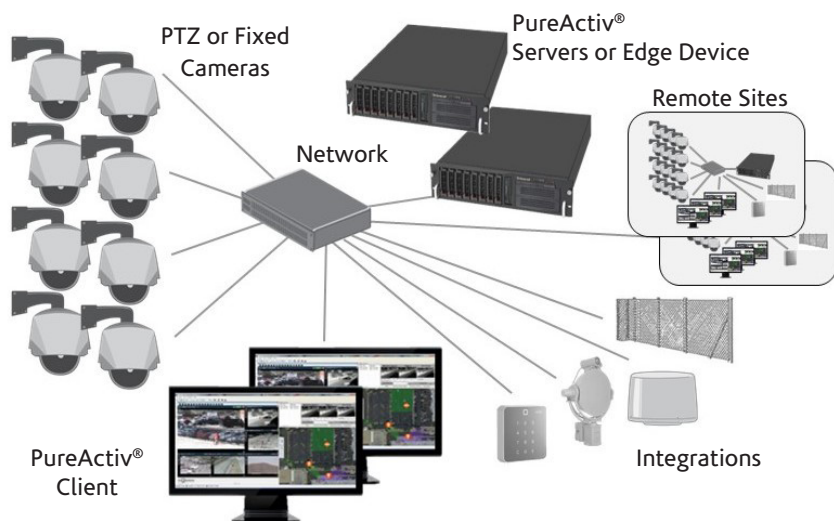
- Dynamic Geospatial Display with FMV
- Situational Awareness
- Alarm Management
- User Path and Location Markers
- Viewshed Indication
- Integrations: Spotlight, Laser, LRAD, GPS
- Fixed and Mobile Deployment





DYNAMIC MAP-BASED USER INTERFACE

SYSTEM ARCHITECTURE DIAGRAM



VIDEO ANALYTICS

Recognition / Classification (person, car, truck, small boat, large boat, etc.)

Automated PTZ Lock-on-target Tracking

Slew to Cued Location / Search Scan

Geo-zone Entry / Exit

Wrong Direction

Speed Threshold

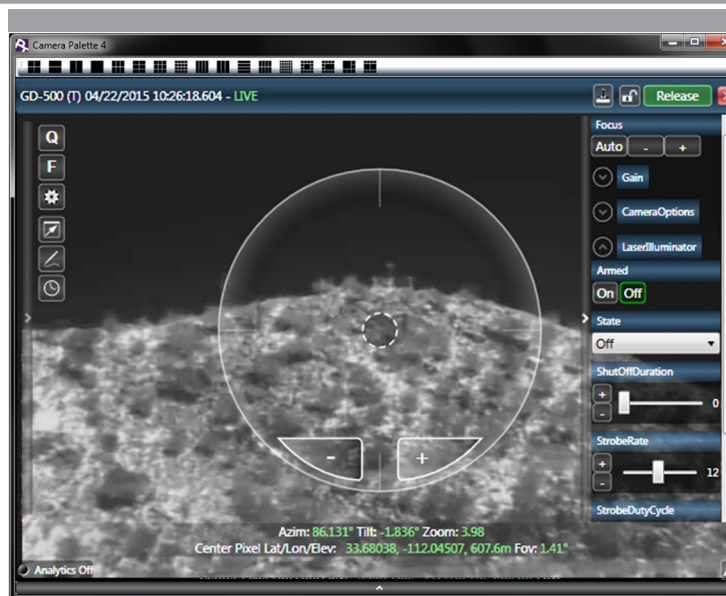
INTEGRATIONS

Camera Brands: Axis, Bosch, DRS, FLIR, General Dynamics, Hitachi, L3, Moog, Panasonic, Pelco, PVP, Sony, Vicon, Vumii

Fence Sensors: Southwest Microwave, Senstar

RADAR: FLIR, SSR, L3, SRC, SpotterRF

Other: GPS, AIS, UGS, Laser, Spotlight, LRAD, Access Control



LONG RANGE SENSOR CONTROL



LOCATION-BASED VIDEO ANALYTICS

Your sensor not on the list? Contact PureTech Systems® to integrate.

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