BORS

BORS provides high-level of accuracy in target detection, classification and tracking in vast border areas.

Progressive Border Surveillance

Border surveillance faces numerous challenges, from the difficulties of effective large area coverage to struggling with high false alarm rates. BORS was developed to effectively address these issues. The solution comprises 3D MIMO Radars and visible-light and thermal imaging sensors, both equipped with edge AI. Additionally, it can integrate a wide range of external surveillance sensors. Utilizing sensor fusion technology, BORS is able to realize a comprehensive approach in surveillance, eliminating sensor limitations and producing the lowest false alarm rate possible.

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How can you benefit by using BORS?

- Extended border areas can be covered by only a few devices. A single panorama camera effectively monitors an area of 3.2 square kilometers.

- Humans can be automatically detected and classified up to 3 kilometers away, with visual target verification guaranteed using the 320 MP visible light and 19.8 MP thermal images.

- High-detection accuracy and effective visual target verification saves time and effort on monitoring and assessing potential threats or unauthorized border crossings.

- Operators can effectively navigate patrol units to spots of suspicious activities, as the system delivers accurate GPS coordinates on the detected objects.

- BORS optimizes resources for surveillance, patrols, and squad units, allowing minimal number of operators to efficiently monitor extended areas.

- Cost-effective network can be implemented between the surveillance points and the Command and Control Center, as the recording of the full-size streams happens on-site using weather and vandal proof NVRs.

- The solution minimizes the need for human resources in maintenance, as the Panorama Cameras are equipped with self-cleaning and deicing systems, enabling them to perform self-maintenance autonomously.

- Logipix hardware components are designed to withstand even extreme harsh environments.

AI-powered imaging and analyzes

BORS effectively monitors border areas day and night, covering both land and water territories. The visible light and the thermal sensor system capture images and analyze full-resolution visual information, accurately recognizing moving objects and their precise locations regardless of lighting conditions. BORS detects, tracks, and classifies various object types within the monitored area, alerting operators only when potential threats are present. The Logipix AI accurately classifies animals, humans, vehicles, vessels, and boats. Front-end visualization is optimized by the Logipix RTDMS, highlighting relevant or urgent situations for quick decision-making.

Multi-level sensor fusion

BORS utilizes multiple sensor types, with optional integration of external sensors to enhance Logipix sensors for optimal detection accuracy and target verification. The solution realize data-level sensor fusion utilizing specially developed visible light, thermal, and 3D MIMO radar sensors to analyze raw data for precise object tracking and classification. With GPS-level sensor fusion, BORS seamlessly processes incoming GPS data from a variety of external sensors, enabling precise control over zoom functions and accurate real-time pinpointing of alarm positions.

BORS is an AI-powered, fused sensor system that detects and localizes potential targets, and assists operators in guiding patrol and tactical units effectively.

ABOUT LOGIPIX

Logipix is among the most innovative technological companies in the world, developing and manufacturing smart video monitoring solutions specifically for large-scale projects and wide areas. Our company is deeply engaged with the constant research and development to provide complete, intelligent systems using the latest microelectronic and computer technology available, while considering the specific characteristics of different application areas. With many years of experience at the field of border surveillance and related fields, Logipix can be your trusted company, who contributes to create safer, and more controlled border areas.