CBS-AAV-PER Perimeter (VMS), 1ch, 1yr
AI Alarm Verification

▶ Seamlessly integrates into the Milestone XProtect® system via the AI Gateway, providing a unified interface for alarm management and verification

▶ Uses cloud-hosted AI models to verify alarms, enhancing detection accuracy for human and vehicle events while minimizing false positives

▶ Robust fallback mechanisms ensure alarm functionality remains active in case of connectivity issues or cloud service downtime

AI Alarm Verification is a cloud-based Video Content Analysis (VCA) service designed to verify human and vehicle events triggered by Bosch intelligent cameras. This service improves detection accuracy and reduces false alarms, leveraging advanced AI models hosted in the cloud.

The service integrates into the Milestone XProtect® video management system, through the Management Client Plugin and AI Gateway.

Integration with Milestone XProtect®

AI Alarm Verification integrates seamlessly with the Milestone XProtect® cloud-based application, enhancing operator efficiency by improving event verification. The integration is achieved through 2 core components:

- **Management Client Plugin**: This plugin enables the configuration of the AI Alarm Verification service within the Milestone VMS environment. Once the plugin is installed, it optimizes stream settings and connects to the AI Gateway for alarm verification

- **AI Gateway**: This service runs in the background, subscribing to alarms triggered by selected cameras. It sends images or videos to the Bosch cloud for analysis

All required Milestone components can be downloaded from the Download store for installation on the local system of Milestone XProtect®.

The Milestone XProtect® application allows operators to adjust sensitivity settings to meet specific operational needs, ensuring optimal verification accuracy. Bosch recommends checking the verification threshold, and proper functionality, by conducting walk-tests.

For further information on AI Alarm Verification and IVA Pro, refer to the documentation available for download in the Bosch online catalog.

Functions

After the installation and the setup of the Management Client Plugin and registration in the Remote Portal, the service provides feedback to the operator in Milestone XProtect® that is based on the verification results of the high-performance cloud service. The results can be as follows:

- Verified: the alarm triggered by the camera was correct
- Rejected: the alarm triggered by the camera was not correct
- Unverified: the alarm from the camera could not be verified

The service allows users to configure how verified, rejected, or unverified alarms are displayed. You can adjust the sensitivity of the service, specifying that alarms should only be verified when high-confidence results are achieved.

If the cloud service cannot be reached, all alarms are shown to the operator as a fallback, and logs are generated to notify of any connectivity issues. In any case, all alarms are always received in the client application. Independent of the results, alarms are available in the Milestone XProtect® alarm logs, dependent on your system settings.

Frequency and volume of requests

- **Scalable request limits**: The service efficiently handles increasing loads

- **Absolute request limits:** The service defines specific limits per camera to ensure consistent performance. Bosch applies a fair-use principle with a maximum request limit. For further information, refer to the Service description document available for download in the Bosch online catalog.

Operational requirements and system availability
- **Fallback alarm**: The system triggers fallback alarms if errors such as web service unavailability or exceeded request limits occur
- **Display setting**: You can select whether rejected alarms shall also be shown to the operator alarm list or directly be sent to the archive
- **Log integration**: Feedback from the AI service are integrated into the system logs for review in the diagnosis module
- **Adjustable sensitivity**: You can modify the filter strength of the AI detector to match your detection sensitivity requirements

Regulatory information

ⓘ **Notice**
   Disclaimer
   This software is not designed, intended, or authorized for use in any type of system or application in which the failure of the software could lead to a risk to health and safety. The user is responsible to verify that the software and its specified functionalities are suitable for the intended application, in particular with respect to accuracy, safety and security.

Parts included

Quantity	Component
1	Set-up of a cloud-based perimeter alarm verification service for IVA Pro Perimeter in Milestone XProtect®

Technical specifications

Software version
Requires Milestone XProtect® version 2023 R3 or higher, with the required Bosch plugins installed and running.

Management Client plugin
Enables configuration of the AI Alarm Verification service within the Milestone VMS environment. Once the plugin is installed, it optimizes stream settings and connects to the AI Gateway for alarm verification.

Device requirements
Compatible Bosch cameras with activated IVA Pro Perimeter and support for continuous recording. The camera must be correctly configured, and must comply with the application requirements or restrictions

Network requirements
Bosch recommends a minimum upload bandwidth of 10 Mbit/s. This recommendation can be different depending on camera type, settings, and alarm scenarios. A lower bandwidth can cause longer processing times for verification results. A lower bandwidth can also cause more timeouts, leading to an increased number of fallback alarms

Licensing and management
A system integrator setting up the service requires a Remote Portal account and must assign a license to the camera.
The registration process for the gateway follows a defined process in the Remote Portal.
Licenses for AI Alarm Verification services are managed and activated in the Remote Portal.

AI Gateway
The AI Gateway service runs in the background, subscribing to alarms triggered by selected cameras. It sends images or videos to the Bosch cloud for analysis.

Required AI Gateway software versions
- The AI Gateway must have the latest software version for optimal performance and compatibility
- Bosch requires regular updates approximately every three months. There may be exceptional hotfixes that require an update in a shorter timeframe. Once an updated software version becomes available, older software versions can be deactivated after three months. Using outdated software can prevent the AI Gateway from communicating with the cloud, disrupting the AI Alarm Verification service

Bosch recommends using the latest camera firmware and the latest Milestone XProtect® software version.

Ordering information

CBS-AAV-PER Perimeter (VMS), 1ch, 1yr
Cloud-based perimeter alarm verification service for IVA Pro Perimeter in Milestone XProtect®
Order number **CBS-AAV-PER**

https://www.boschsecurity.com