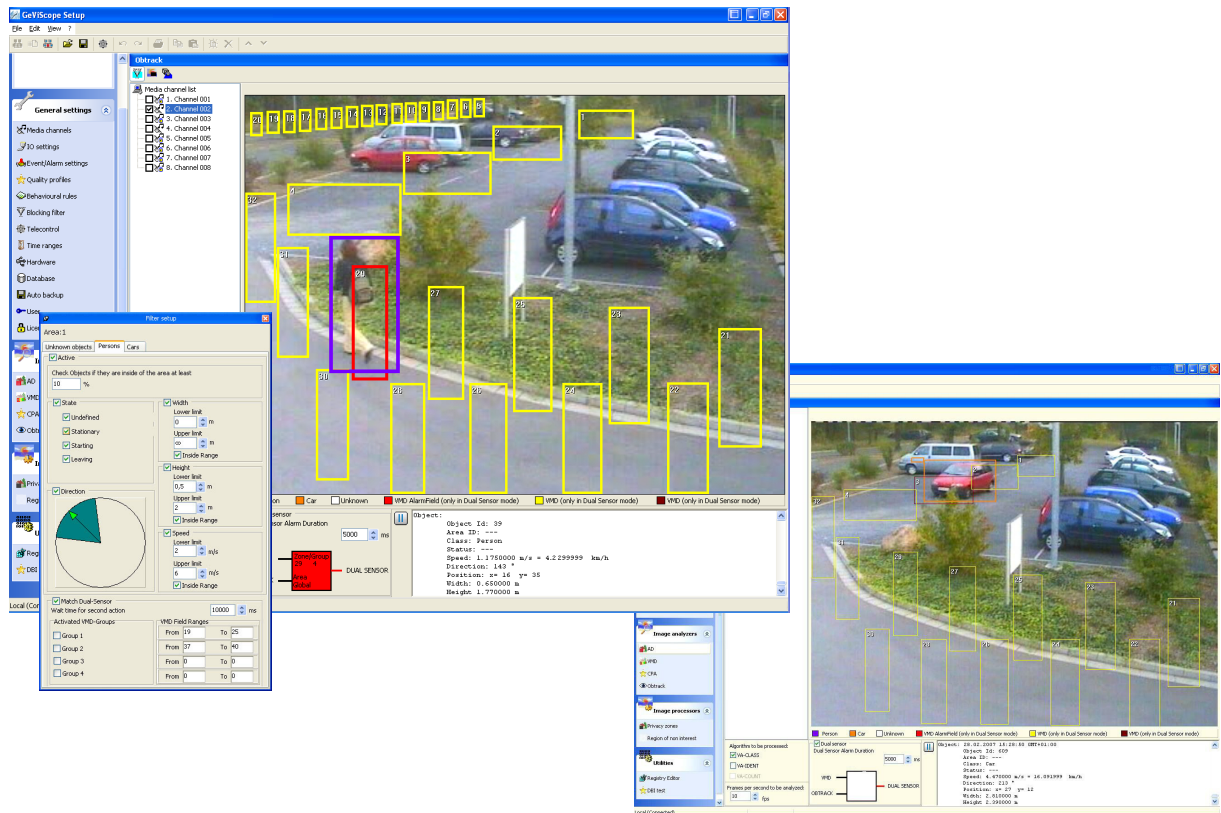




# Dual-Sensor

The perfect combination of VMD and VA Class



## Product information

Using a combination of two functionally very different detection methods, Dual Sensor enables video motion detection in real time, even under the most critical outdoor environmental conditions. Precise object classification and object recognition in exactly defined alarm zones work together to ignore all irrelevant movement in the picture so that the false alarm rate is extremely low. Disturbances from unfavorable weather conditions, small animals or fluctuating light reflections are suppressed or ignored. The high level of detection accuracy of the Dual Sensor makes the system predestined for all monitoring tasks in outdoor settings – only “real” alarms reliably support the security personnel.

- | 3-D video sensor function in real time with measurement times from 40 ms to 10 s for very fast and very slow movements
- | 128 freely definable detection fields for analysis of highly complex picture contents
- | Extremely low false alarm rates due to reliable suppression of global disturbances in conjunction with parallel real-time analysis of various algorithms
- | Classification of recognized objects in the categories vehicle, person and other objects
- | Automatic switching of the operational mode (e.g. day/night, summer/winter)
- | Analysis options with regard to the respective object status (stationary, leaves the scene, starts to move) and the object's properties (speed, size)

# Technical data

**The GeViScope Dual Sensor** (GSC/Dual-Sensor) combines Video Motion Detection (GSC/VMD) with intelligent Video Analytics (GSC/VA-Class) in one system:

**GSC/VMD** - The proved 3-D Video Motion Detection evaluates in adjustable intervals (measure cycles) a measurement (measurement value) for the average brightness in each VMD zone individually set in the video picture (max. 128). The evaluation algorithm of the VMD compares these measurement values in relation to the set sensitivity and diversifies between global and local changes, i.e. whether there are changes to brightness in many VMD zones or in only one VMD zone. Local changes will be considered as alarm, global changes will be ignored (adjustable). VMD zones can be connected to chains in order to detect direction-dependent or speed-dependent motions in the video picture.

## The most important features of GSC/VMD:

- | 128 VMD zones are freely definable in function, position, size and sensitivity
- | Measure cycles of up to 40 ms to 10 s for real time detection of very fast and very slow motions
- | Three-dimensional field adaptation via special perspective function
- | Algorithm for diversification between local and global changes in the picture
- | Collection and evaluation of direction and speed
- | Vector function can be switched on
- | Time-dependent switching between various optional parameter settings

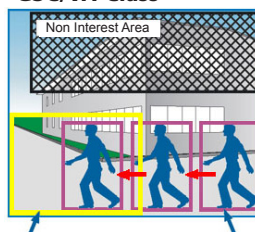
## GSC/VMD



VMD-Zones

GSC/VMD reports a VMD alarm to the Dual-Sensor analytics if an object corresponding to the parameter set for size (field sensitivity in %), direction and speed enters a VMD zone.

## GSC/VA-Class



Area of Interest, alarm criteria adjustable via filter

An object is detected and classified as a person

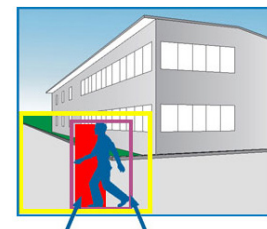
GSC/VA-Class identifies an object in the picture and reports as soon as this object (e.g. a person) is detected in the Area of Interest.

**GSC/VA-Class** - Intelligent Video Analytics permanently analyses the pixels in the complete video picture and generates a background model of the scene in a self-learning mode. The background model is continuously updated in order to take over global picture changes. Objects to be detected are defined in the setup according to size, speed, motion direction and status. Up to 64 areas of interest can be set for the video picture. These trigger different kinds of alarm behavior upon detection of an object. If a group of pixels in the updated picture changes in comparison to the background model the system calculates whether this group of pixels corresponds to the characteristics of a pre-defined object and reports an alarm according to the settings for the areas of interest.

## The most important features of GSC/VA-Class:

- | Intelligent real-time analysis of video data
- | 64 areas of interest / areas of non-interest
- | Classification of persons and cars plus their characteristics as for example speed, size, direction and status (fast, slow, in motion)
- | Three-dimensional detection of object size by parameterizable reference lines (definition of real distances in the picture)
- | Motion Tracking
- | Detection of abnormal activities and security-relevant situations
- | Automatic tracking of moving persons

## GSC/Dual-Sensor



VMD-Alarm

GSC/VA-Class: Person is detected in Area of Interest

## Dual Sensor reports Alarm!

A person was detected in an Area of Interest and triggered a VMD detection field simultaneously.

	VMD	AD Basic	AD Extended	Dual-Sensor	VA-Class	ANPR	VA-Missing	Audio AD	CPA
GeViScope-HS	○	●	○	○	○	○	○	●	○
GeViScope-IP/SE	○	●	○	○	○	○	○	○	○
re_porter	—	●	—	—	—	○	—	—	○
re_porter_sensor	○	●	—	○	○	○	—	—	○
re_porter_bank	—	●	—	—	—	○	—	—	○
MultiScope III/XP	—	—	●	—	—	—	—	—	●

● = Standard ○ = Optional — = Not available

## Operating system

Windows XP with Service Pack 3 and Net Framework Version 2.0 or higher

Order no. GSC/Dual-Sensor: 8.31210

Please take into account that video analysis applications require extensive project-specific consultation. For an optimal result, numerous environmental conditions and system parameters must be considered. Our specialists are happy to provide you with assistance! We guarantee simultaneous analysis of four (re\_porter) or six (GeVi-Scope) D1 (4CIF) resolution video signals on the local device without interfering with other functions. Exception: AD and VMD licenses for analog cameras and CAM2IP and VIPCAM can also be operated without restrictions.

Technical alterations reserved

**GEUTEBRÜCK GmbH**

Im Nassen 7-9 | D-53578 Windhagen | Tel. +49 (0)2645 137-0 | Fax-999 E-mail: info@geutebrueck.com | Web: [www.geutebrueck.de](http://www.geutebrueck.de)