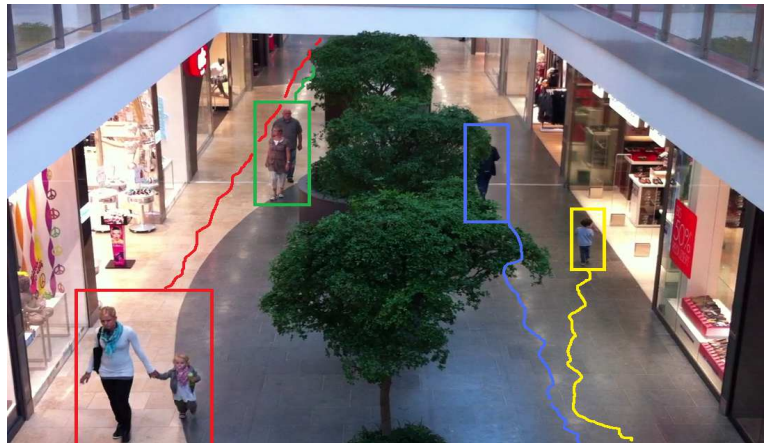


RIVA® – Megapixel cameras with integrated 3D Video Analytics - The next generation –

Creating intelligent solutions with Video Analytics (VCA - Video Content Analysis)

Intelligent IP video surveillance is one of the most effective ways to secure any environment. Its functions are versatile and can be used with almost all applications and on vertical markets.

Fast becoming a standard security system for many organizations, IP video surveillance becomes an intelligent solution when the right Video Analytics (VCA) is applied to it.



artec technologies AG chose RIVA's camera line with integrated video analysis and has successfully been using it in combination with MULTIEYE® systems for several years. The RIVA VCA is one of the best and most reliable video analytics and offers iLIDS certified video analytics. Only few video systems meet the high requirements of a real-time alarm detection by iLIDS. The iLIDS certification is required for the operation of public video surveillance systems in the UK.

VCA - from passive to reactive and preventative

While IP video capabilities enable organizations to view their entire environment, that doesn't necessarily result in proactive monitoring. All this changes though once VCA applications are embedded into the solution, transforming passive IP video systems into proactive solutions.

With the ability to identify activity that needs attention, technical equipment and staff can be deployed more efficiently.

Benefits of VCA

RIVA® made VCA capabilities a standard feature on all IP-cameras (standard, megapixel and HD resolution), IP encoders and PC cards. This combined RIVA's device with Video Analytics provides the most comprehensive surveillance coverage to combat today's increasing security risks.

With VCA motion-based recording feature, storage needs are substantially reduced, saving security-conscious organizations significant expenses over time. Additionally, RIVA's cameras and encoders embedded with VCA also become sensors, eliminating the need for other detection systems.

Video analysis benefits extend far beyond the proactive security it provides. Through its advanced People Tracker and Counting Line algorithm, it Improves business information and efficiency as real-time metadata can be used by management, marketing and security to gain operational insight.



Reliable object and people tracking, even in highly frequented places.

What you can expect from VCA technology:

- VCA alarm events integration with the world's leading video management systems
- RIVA VCA is approved by the UK Home Office i-Lids*
- Future ready with easy upgrade
- Works out of the box, a Plug 'n' Play solution
- Self-learning algorithm automatically adapts to environmental changes
- Tracks up to 100 targets and has up to 40 detection zones per camera
- Easy-to-use web browser setup based on simple graphical controls
- Simple, unique 3D grid calibration
- Robust tracking engine - tracks stopped and very slow movement

- Ignores light changes due to cloud shadows, artificial lights and camera auto-iris operation
- Ignores repetitive movement such as swaying trees or rippling water
- Adjusts to image degradation caused by rain, fog, dirty lens and low sun position glare

VCA System Overview

To address the wide range of your customers' needs, RIVA has created flexible VCA packages that address specific environments. Always included, and at no extra cost, our primary VCA Standard License features:

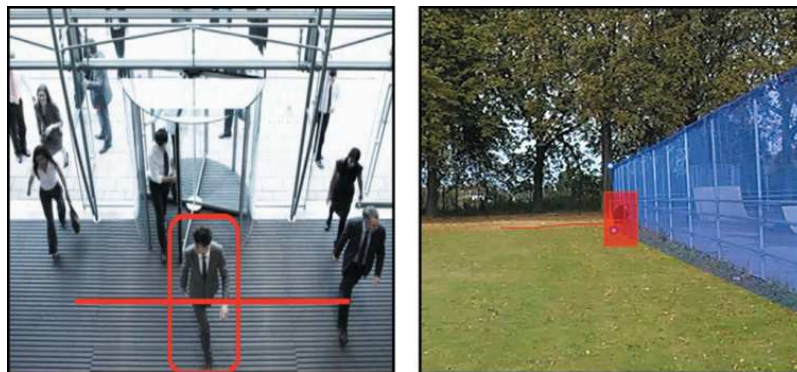
- **Intelligent motion detection**
- **Camera tampering detection**
- **No manual adjustments or calibration necessary**
- **Works out of the box, without the need for set up**

VCA also has a wide spectrum of advanced intelligent VCA filters. These advanced VCA filters can be ordered bundle as needed, and make up the advanced VCA license packages.

RIVA® cameras include advanced, intelligent VCA Intrusion Filters:

- **Presence filter** - Detects when an object or individual has penetrated the defined perimeter
- **Enter and exit** - An alarm is raised when an object crosses from the outside to the inside of a detection zone. Conversely, an alarm is raised when an object crosses from the inside to the outside of a detection zone
- **Passing entrance areas/exits** - Used to detect people appearing or disappearing through a doorway but ignores people passing by in front of the doorway.
- **Dwell** - Objects that dwell inside a zone for longer than the pre-defined amount of time will trigger an alarm such as loitering people

- **Tailgating** - Object tailgating is defined as two objects crossing a virtual line or zone within in a pre-defined time frame
- **Stopping** - Objects that are stopped inside a zone for longer than the defined amount of time will trigger an alarm
- **Direction** - Objects that travel in the configured direction (within the limits of the acceptance angle) through a zone or over a line trigger an alarm



Advanced Intelligent VCA Object Detection Filters include:

- **Abandoned object** - This filter detects the abandoning of an object in a pre-defined zone such as a bag or suitcase left on the street
- **Removed object** - Significant objects are detected when removed from a zone



Advanced Intelligent VCA Counting Filters include:

- **People counting** - An excellent tool for collecting statistics on customer behavior, this filter counts customer flow without the need for human intervention.
- **Vehicle counting** - Used for both commercial and safety applications, this filter captures statistics on vehicle flow
- **Stabilizer** - In environments where camera stability is an issue, this feature will compensate for any movement to provide a clear view.



VCA Additional Application Packages for Special Operations

Designed with specific vertical markets and environments in mind, these advanced VCA application license packages provide focused solutions tailored to customer needs.

- **VCA Count** - This counting solution includes a bi-directional line-crossing filter, suitable for counting people in busy doorways and entrances. VCA Count is also suitable for counting vehicles.
- **VCA Access** - This access control solution protects your access points with tailgating detection and a line-crossing filter.
- **VCA Detect** - A perimeter solution, this package includes classification, direction and dwell filters.

All solutions include the primary VCA functionality.

Comprehensive Full VCA Packages for complete coverage

Our most comprehensive VCA solutions, these packages provide the ultimate in IP Video VCA enable surveillance protection. Utilizing the extensive VCA capabilities found in these solutions, customers are able to fully leverage proven cost, resource and time savings.

Also available:

- **VCA Surveillance** - As a complete surveillance solution, this package includes the Surveillance Tracker, all surveillance filters and has been optimized for outdoor use.

- **VCA Professional** - For the enterprise environment, this package includes all surveillance filters in addition to the people tracker and counting line filters. The people tracker filter has been optimized for populated indoor scenes.



In combination with MULTIEYE software and recorders

The RIVA video analysis controls the recording and events of MULTIEYE recorders/software via network. The MULTIEYE SensorLog software module is needed as data interface (license list price € 99,00) which is added for free for each RIVA camera bought from us.