Dallmeier

HEM SPHERE®

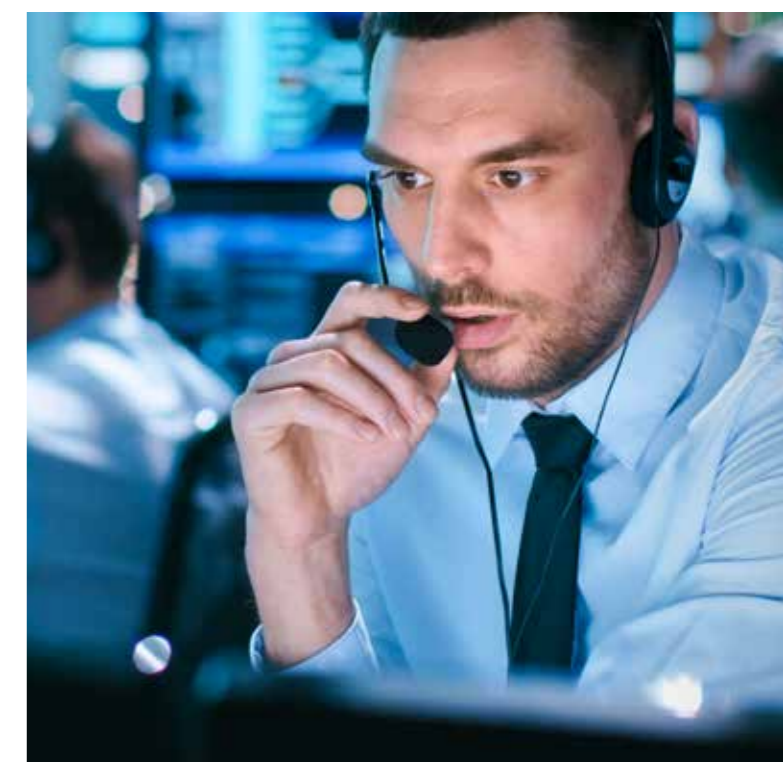## THE OPEN SOFTWARE PLATFORM FOR SECURITY AND BUSINESS

MAKING YOUR OPERATOR MORE EFFICIENT
OPTIMISING SECURITY AND BUSINESS PROCESSES

How important is it for you as a Security Manager or Process Manager that your staff make well-informed decisions?
Is it critical for them to be able to guarantee maximum protection of people and property?
And to implement business processes on the basis of comprehensive information?

If you answered yes to the above, Dallmeier HEMISPHERE® — the open, flexible platform for security and business — is the right solution for you.

VIDEO AND DATA TEAM UP

Dallmeier HEMISPHERE® is the open platform for businesses that want to improve their security and business processes.
HEMISPHERE® links data from various sources intelligently with video images and processes.

FLEXIBLE THANKS TO PLATFORM STRATEGY

Whether you are a small to midsize enterprise (SME) with just a few cameras or an international corporation with tens of thousands of systems worldwide: Dallmeier HEMISPHERE® offers you the right solution.

THE REQUIREMENT DEFINES THE SOLUTION

With HEMISPHERE®, customers from a wide variety of industries select exactly the software modules they need for their applications and assemble them individually – just like a construction kit.
HEMISPHERE® comprises Dallmeier camera and recording systems as well as a wide variety of deeply integrated third party systems.
For solutions that are exactly tailored to your industry and your organisation.

CUSTOMER-SPECIFIC DEVELOPMENT TO ORDER

For more complex applications, the experts of the Dallmeier development team are at your disposal to provide assistance anywhere in the world – with over 37 years of experience in many countries and industries.

VIDEO
IMAGES

VIDEO
ANALYTICS

OTHER
DATA SOURCES

USER-FRIENDLY FRONTEND
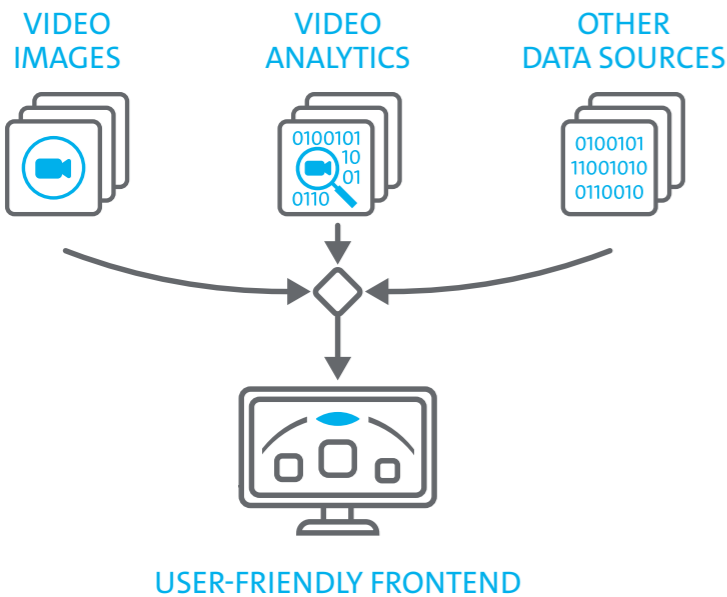
ACHIEVE YOUR GOALS

LOCATE AND MANAGE

HEMISPHERE® MEANS MODERN PROCESS- AND SECURITY-MANAGEMENT FOR DIFFERENT APPLICATIONS

ALL EVENTS CLEARLY IN VIEW

With integrated map material, operators can locate events and camera sites precisely at any time. The optional „Active Objects" map helps to select locations of interest accurately and track alarms reliably. This is especially helpful in all areas of building management.

- Rapid orientation in space
- Geographical location of incidents
- Intuitive „situational awareness"
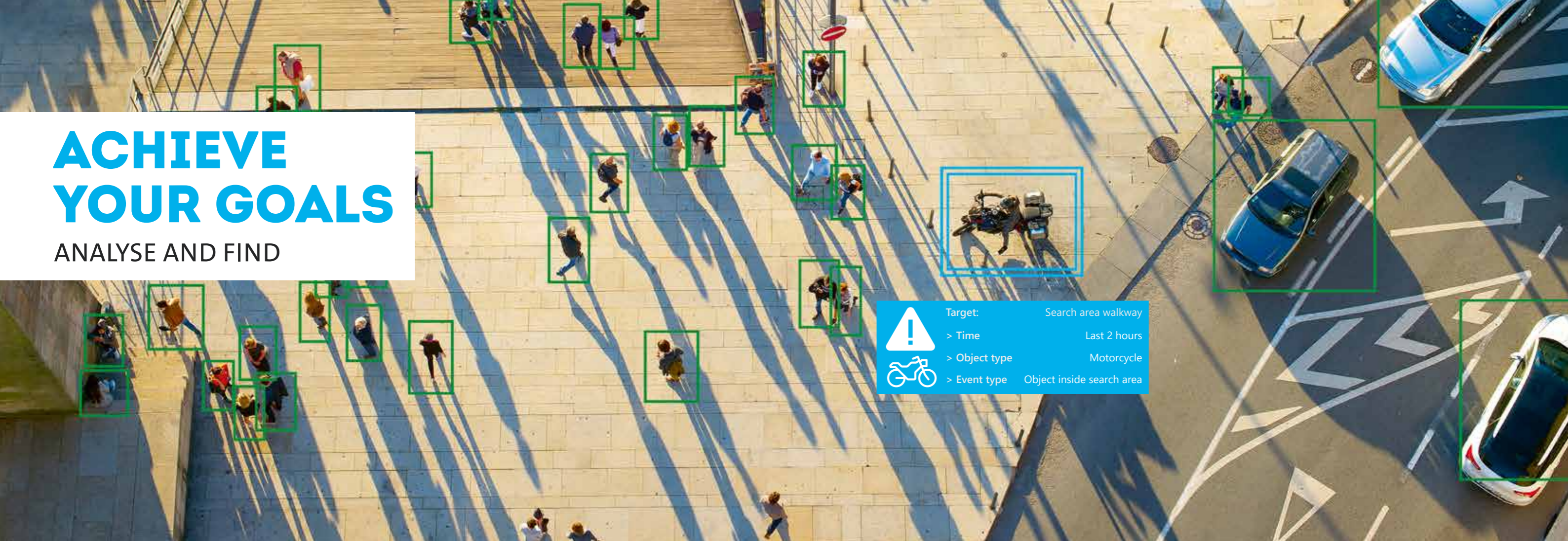- Integration of various interfaces
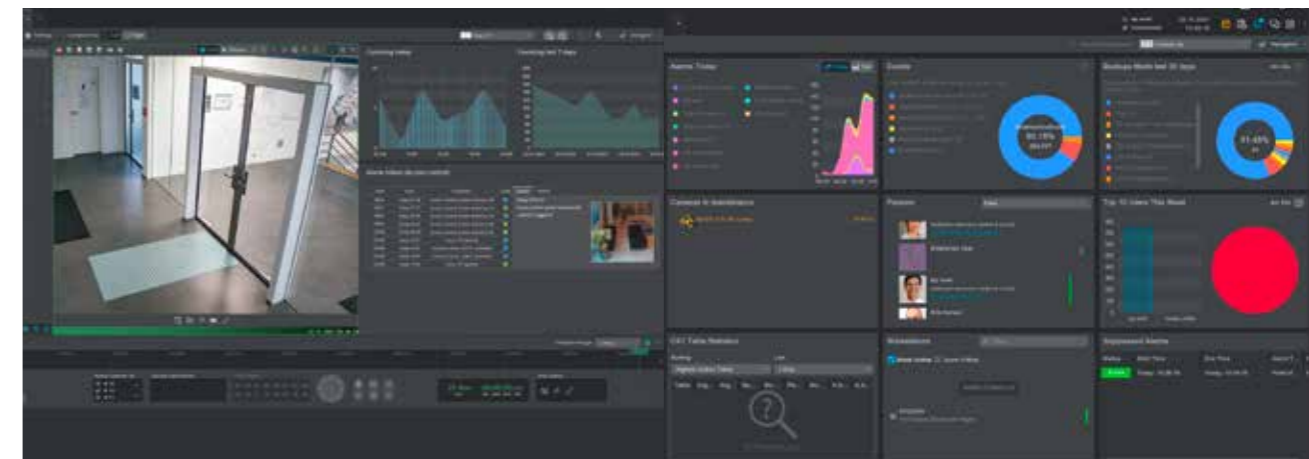
MANAGE INCIDENTS

Through the HEMISPHERE® platform you can guide response forces from one central location and above all with accurate information — including cross-media information processing and reliable evidence collection. Accordingly, responses to pyrotechnics violations in stadiums can be managed as effectively as video surveillance and situational awareness in the Safe City sector.

- Information-supported activity at all times
- Seamless, efficient communication
- Optimal support for response forces
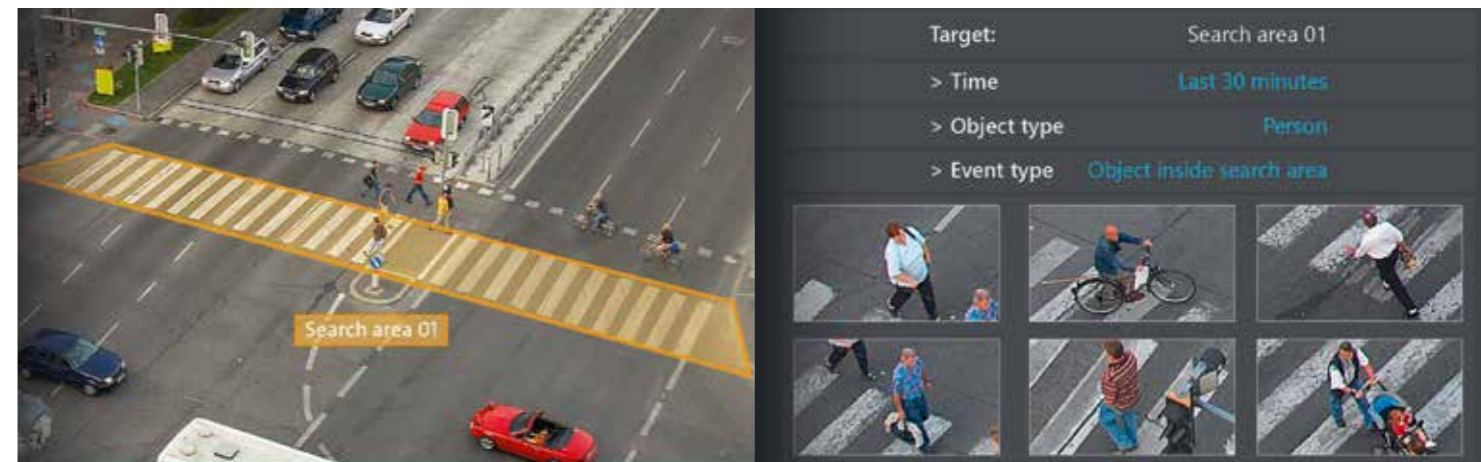- Reliable documentation and evidence collection

Target: Search area walkway
> Time: Last 2 hours
> Object type: Motorcycle
> Event type: Object inside search area

Target: Search area 01
> Time: Last 30 minutes
> Object type: Person
> Event type: Object inside search area

Search area 01

ACHIEVE YOUR GOALS

ANALYSE AND FIND
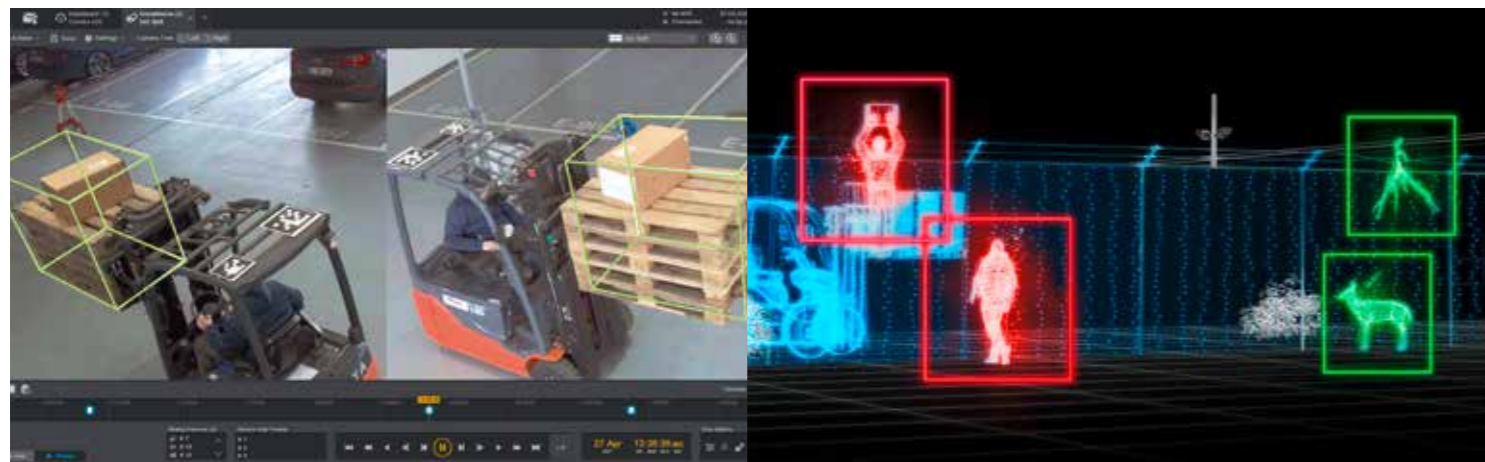
USE ANALYTICS SMARTLY

Image-based capture of data enables a multitude of solutions:
From object classification at the perimeter to "on-the-fly" volume measurement of packages.
Acting as a "data broker", HEMISPHERE® ensures that you can correlate the results of analysis and processes most effectively and process them further.

- Workload reduction through AI assistance
- Increased efficiency through AI – e.g. due to reduction of false alarms
- Automation of manual tasks
- Operations and processes based on maximum information

FIND WITH EASE

The Dallmeier "Comfort Search" feature provides the operator with the desired results in the shortest possible time. Particularly when combined with Dallmeier's patented Panomera® camera systems, it delivers an unprecedented situational overview. One Panomera® captures up to 2,000 m² in the highest resolution density routinely required to identify unknown individuals (250 px/m or more).

- Unrivalled situational awareness
- Rapid location of incidents
- Situational assistance through analytics
- Preview images and timelines
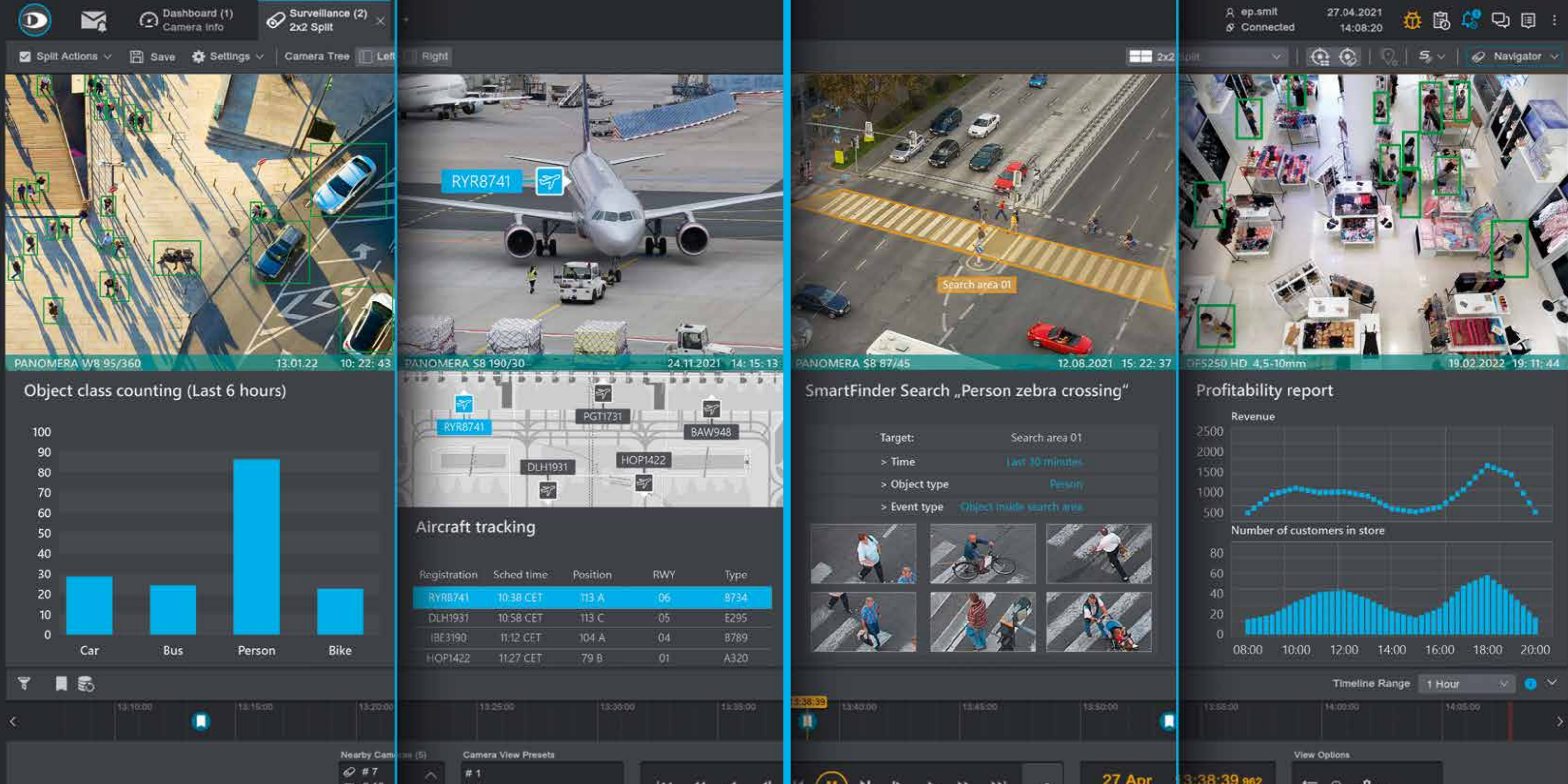
A TRUE ALLROUNDER

WHICH PROBLEM ARE YOU SOLVING TODAY?

IDEALLY EQUIPPED FOR ANY APPLICATION AREA

The modular principle allows you to address a wide range of applications with HEMISPHERE®, e.g.:

- Video and alarm management for medium-size, large and very large organisations

- Situational Awareness for directing response personnel

- Digital incident management – such as in football stadiums, for urban surveillance, in logistics or port areas

- Collection, correlation and analysis of data from an enormous range of sources

- Physical Security Information Management (PSIM): Integration and management of video systems, access control as well as fire and intrusion alarm systems up to customer-specific interfaces

- Display, processing and correlation of data for process optimisation and business intelligence applications – captured conventionally or with AI assistance
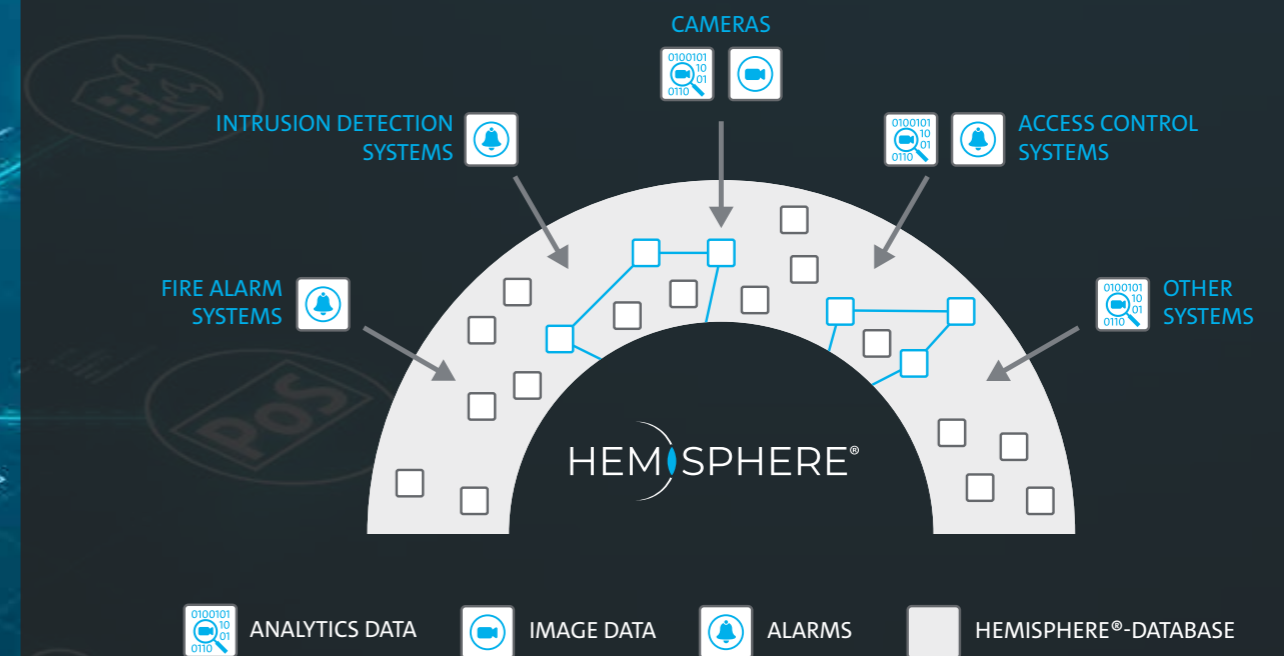
THE DATA BROKER
THE RIGHT INTERFACE FOR YOUR APPLICATION

EXTENSIVE INTEGRATIONS FOR SECURITY AND BUSINESS

Based on the "Open Platform" strategy, HEMISPHERE® integrates an immense range of third-party systems. Interfaces tailored precisely to the respective application filter, sort and localise data from a wide variety of sources and merge them intelligently.

INTRUSION DETECTION SYSTEMS

CAMERAS

ACCESS CONTROL SYSTEMS

FIRE ALARM SYSTEMS

OTHER SYSTEMS

HEMISPHERE®

ANALYTICS DATA   IMAGE DATA   ALARMS   HEMISPHERE®-DATABASE

ONE PLATFORM – MANY APPLICATIONS

Through the comprehensive integration of camera images and data, a cockpit is created which is optimised for human perception and processing.
All security systems, such as access control, fire and intrusion alarm systems and building automation are thus made available for unified access.
Additionally, industry-specific production systems –
e.g. for logistics or for "situational awareness" – can also be incorporated.
The result: Your individual "single pane of glass" for security and business.

ALL STANDARD PROTOCOLS

Support for various standard protocols such as OpenWire, STOMP, MQTT and WebSocket ensures the seamless integration of systems based on REST interfaces and ActiveMQ Message Broker.

INTEGRATION OF THIRD-PARTY CAMERAS

Support for ONVIF profiles S and T enables the integration and centralised control of cameras from many third-party manufacturers, including their analysis data and alarms.

COMPATIBLE WITH YOUR IT ARCHITECTURE

Nowadays, customers typically pursue their own "deployment" strategy, and with good reason. Regardless of whether all components are installed on their own hardware, run in VM environments or are to be represented in different cloud scenarios:
Dallmeier HEMISPHERE® fits into any modern IT landscape.

USER-FRIENDLY IN ANY CASE

With individually adaptable widgets, you can configure custom workstations for any area of responsibility. This makes it possible to direct attention to a specific target and ensure maximum focus on the task at hand. Your staff can then gain a rapid appreciation of any situation, evaluate it and initiate necessary measures. This raises both efficiency and motivation.

NO DISTRACTIONS

Individually adaptable dashboards with an Alarm and Event inbox continuously deliver information that is relevant for the user groups concerned.

SEARCH AND FIND

The primary objective of many video tasks is to find out what is most important as rapidly as possible. The SmartFinder finds and displays events and video sequences with preview images.

SEAMLESS COMMUNICATION

HEMISPHERE® provides a communication structure that enables cooperation among personnel in all task areas without media interruption. This includes a messaging service, comprehensive reporting functions, tools for collecting evidence, creation of digital incident files and much more.

VIRTUAL ASSISTANT INCLUDED

People do some things better than machines, and machines excel at others.
HEMISPHERE® combines the best of both worlds: AI-based video analytics channels information in advance. Workload is reduced and staff can concentrate on the essential.

INTERACTIVE MAP

The interactive 3D map with context-sensitive elements ("Active Objects Map") and automatic inclusion of associated camera images helps users to assess and manage situations rapidly.

AI-based video analytics extracts relevant information, which is displayed in dashboards, so staff never lose sight of what is most important.

THE ASSISTANCE SYSTEM
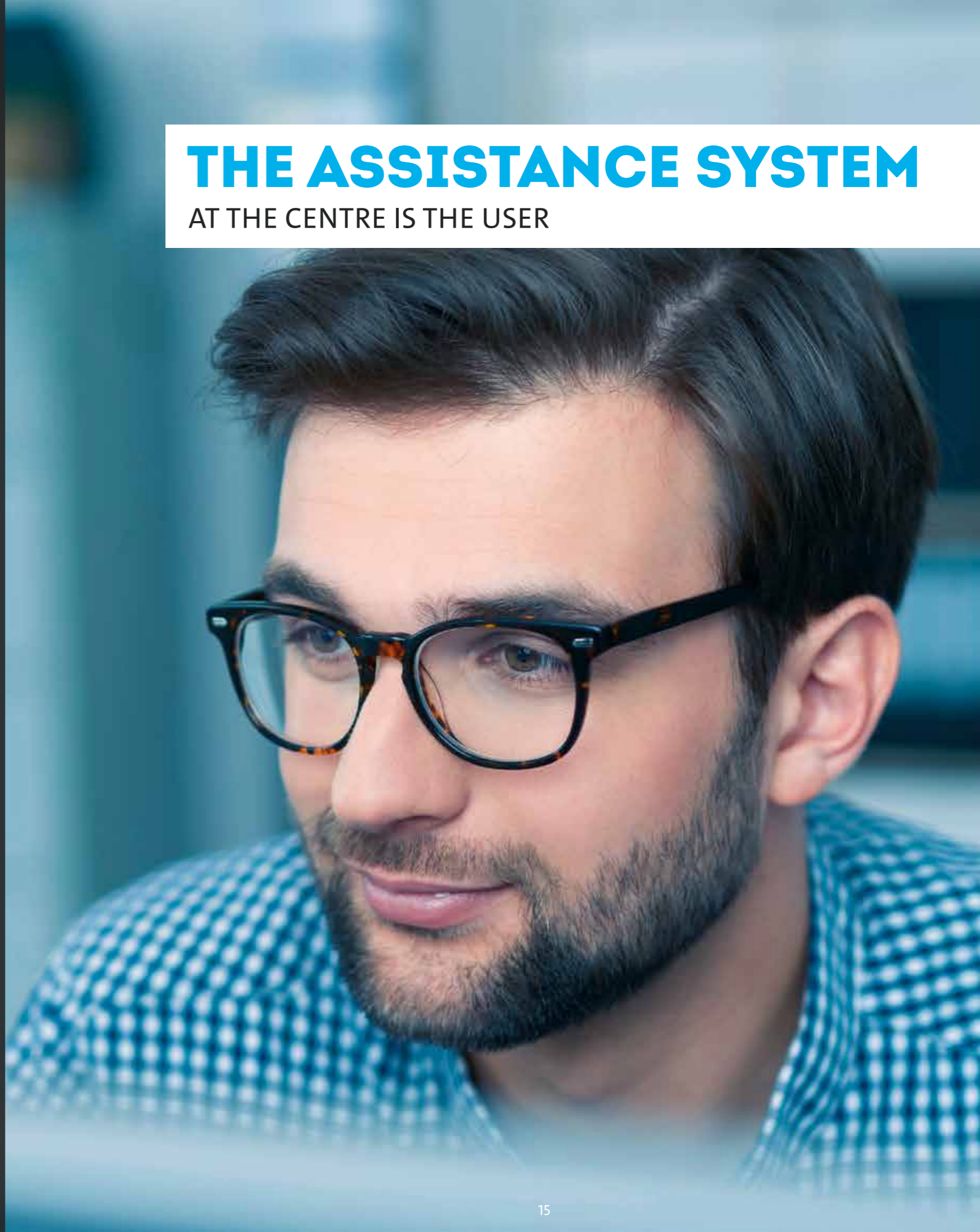## AT THE CENTRE IS THE USER

FITS ALL SIZES

From museums or bank branch networks to logistics companies all the way up to major airports, Safe City installations with over 1,500 users or casino complexes with more than 30,000 cameras:

HEMISPHERE® installations all over the world demonstrate that they are suitable for use by organisations of all possible sizes. With LDAP support and the flexibility of the HEMISPHERE® backbone server, installation and configuration become child's play.
Get in touch with us!

ONLY USE WHAT YOU NEEDED

With HEMISPHERE®, you only use those modules you actually need.
At the same time, the system grows flexibly, reflecting your requirements.
Maximum cost-effectiveness is guaranteed.

PSIM? TAILORED TO FIT

The various modules of the HEMISPHERE® platform allow expansion to the customised total building management or situational awareness system.

ONE DONGLE FOR EVERYTHING

The installation can be expanded very easily without interrupting operations – with just a single dongle using the C2V (Customer-to-Vendor) procedure.

ACROSS BORDERS AND BETWEEN SITES

Do you want to include branches which have a less than ideal internet connection / network structure? With the sophisticated "PRemoteHD" technology, this can be achieved effortlessly.

YOUR TAILOR-MADE SUIT
FOR SECURITY & BUSINESS

SECURE IN ALL SENSES OF THE WORD

Protection of personal data has priority, particularly when video-supported systems are used. For this reason, Dallmeier solutions are "developed and made in Germany", and conform to the GDPR guidelines "Privacy by Design" and "Security by Design".

MADE IN GERMANY
MADE BY DALLMEIER

Continuous improvement processes, a high degree of vertical integration and external, independent penetration tests all serve to ensure the highest possible levels of performance, resilience, cybersecurity and data protection.

MAXIMUM DATA SECURITY

End-to-end SSL encryption of all data ensures the highest possible level of data security.

READY FOR THE FUTURE

Sustainable, secure system infrastructure enabled by the latest Kubernetes and Microsoft Windows system landscape, MQTT protocol and much more.

SECURE USER ADMINISTRATION

Authentication with LDAP ensures secure user administration and data protection. Instructions such as the dual control principle or viewing of video images solely by external service providers are easily implemented.

PROTECTION AGAINST MANIPULATION

Audit compliance is assured with blockchain technology and LGC Forensics certificate.

BUSINESS CONTINUITY

A range of „failover" mechanisms guarantee continued high system availability in the event of failure or maintenance work on the infrastructure.

PRIVACY BY DESIGN FEATURES

SECURITY BY DESIGN FEATURES

GDPR

SECURITY & PRIVACY
MADE IN GERMANY

FITS YOUR CLOUD STRATEGY

DEPLOYMENT ACCORDING
TO YOUR REQUIREMENTS

PUBLIC CLOUD

The applications of the HEMISPHERE® platform are compatible with all common public cloud providers. At the same time, the individual modules can easily be integrated in e.g. AWS, Microsoft Azure or the Google Cloud Platform.

HYBRID CLOUD

Many customers rely on a combination of public and private cloud. The flexibility built into the Dallmeier HEMISPHERE® platform allows an optimal arrangement transcending hybrid infrastructures.

ON-PREMISES

Of course, users can also operate all components of the HEMISPHERE® platform "on-premise", on dedicated Dallmeier hardware, on their own servers, even in virtual environments.

PROVEN IN PRACTICE
WHAT OUR CUSTOMERS SAY

DANISH STATE RAILWAYS

HEMISPHERE® replaces or supplements many systems we used previously, and improves the efficiency and quality of our workflow. Through the combination of Dallmeier camera technology, Cloud Deployment and the HEMISPHERE® management components, we now have an exceptionally powerful system that delivers far more than conventional video management.

Søren H. Nielsen,
Technical Director,
Danish State Railways

PLUSCITY LINZ

*The backward compatibility and flexibility of the Dallmeier solutions is excellent for us.
We can expand and modernise the system whenever and in any direction we wish.*

Michael Pechmann,
Security Manager,
PlusCity Linz

RAIFFEISEN STATE BANK OF UPPER AUSTRIA

The handling of 400 branches – operators and equipment – can only be displayed by using a management platform such as the Dallmeier HEMISPHERE®.

Maximilian Brunner,
Corporate Security,
Raiffeisen State Bank of Upper Austria

AIRPORT

HEMISPHERE® enables the digital capture of aircraft registrations all the way through to optimised passenger flow. In combination with Panomera® camera systems, cost-efficient "Remote and Virtual Tower" solutions can be implemented.

INDUSTRY

Linking incidents with video images improves workplace safety and provides valuable information for optimising business performance – across multiple sites and borders, of course.

LOGISTICS

In the Logistics sector, the capabilities of the HEMISPHERE® applications extend from video-based package tracking through efficient security and claims management to "on-the-fly" volume measurement.

SAFE CITY & SMART CITY

In the public sector, customers use HEMISPHERE® to better manage criminal incidents, digitally support response forces and capture information for Smart City applications.
In combination with the Panomera® camera systems, this gives rise to an unprecedented situational awareness capability.

STADIUM

With the aid of digital incident files, stadium operators can prosecute and manage offences such as firework violations, racially motivated disturbances or assault – thereby reducing costs incurred through fines, for example. Safeguarding of "sterile areas" is possible, as is comprehensive building and infrastructure management through the integration of a wide range of third-party systems.

CREATING THE SOLUTION

WHAT ARE YOUR NEEDS?

CREATING YOUR CUSTOMISED HEMISPHERE® SOLUTION IS QUITE SIMPLE

1

WHAT ARE YOUR REQUIREMENTS?

You define a preliminary requirements catalogue and think about the applications you need.

2

LET'S ANALYSE YOUR NEEDS

Get in touch –
Our experts will be glad to hear from you at:
hemisphere@dallmeier.com

3

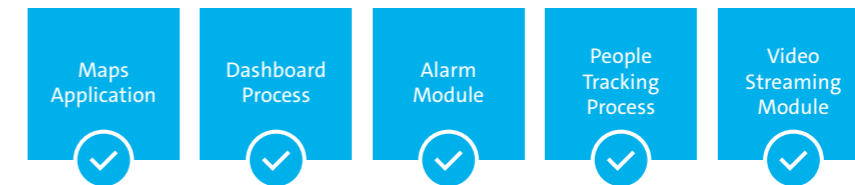**TOGETHER, WE'LL FIND
THE SOLUTION THAT FITS**

Our experts help with "best practices" from comparable projects and determine the modules needed.

**TALK
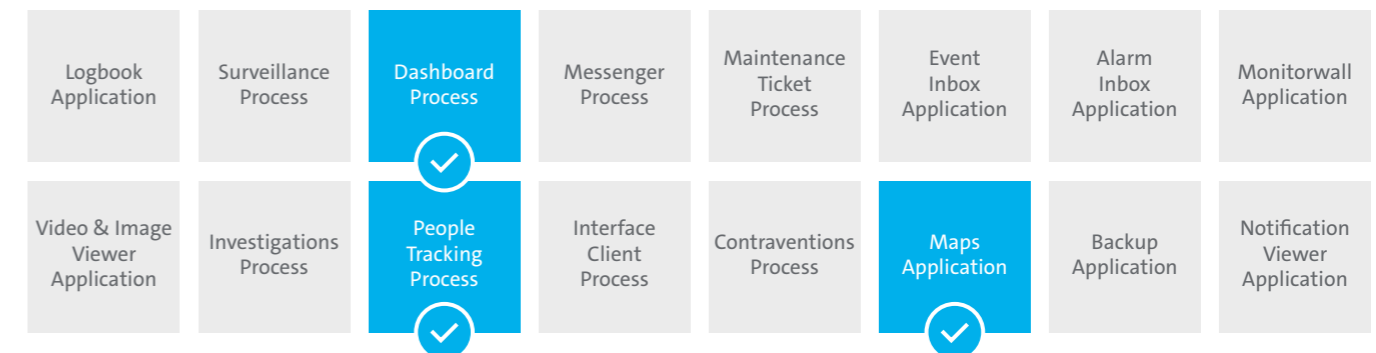TO A DALLMEIER
EXPERT**

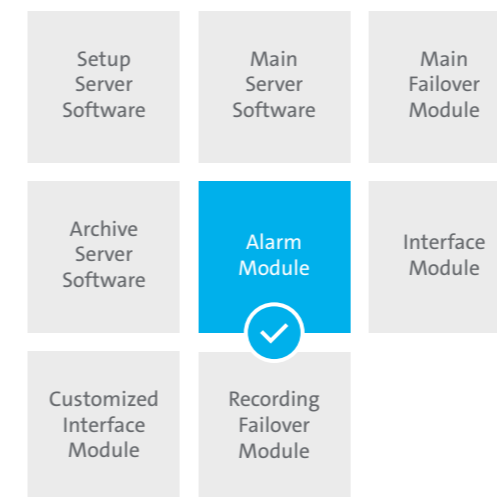### THE REQUIRED MODULES ARE DETERMINED BY YOUR NEEDS
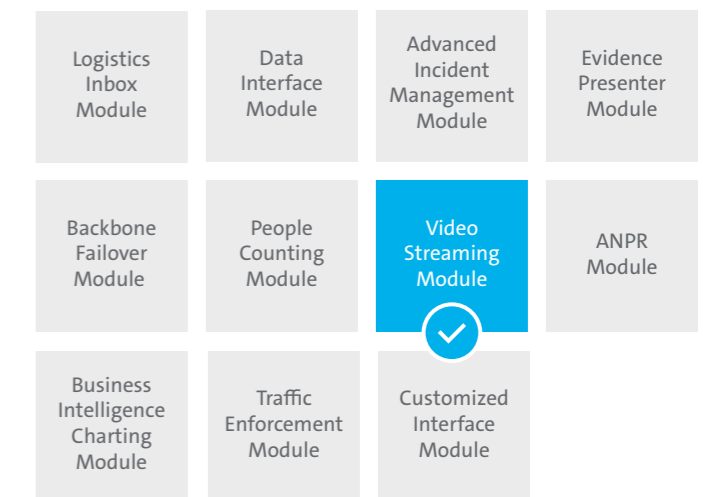
INDIVIDUAL SOLUTION

Maps Application ✓	Dashboard Process ✓	Alarm Module ✓	People Tracking Process ✓	Video Streaming Module ✓

FRONTEND

Logbook Application	Surveillance Process	Dashboard Process ✓	Messenger Process	Maintenance Ticket Process	Event Inbox Application	Alarm Inbox Application	Monitorwall Application
Video & Image Viewer Application	Investigations Process	People Tracking Process ✓	Interface Client Process	Contraventions Process	Maps Application ✓	Backup Application	Notification Viewer Application

VIDEO MANAGEMENT

Setup Server Software	Main Server Software	Main Failover Module
Archive Server Software	Alarm Module ✓	Interface Module
Customized Interface Module	Recording Failover Module	

DATA MANAGEMENT

Logistics Inbox Module	Data Interface Module	Advanced Incident Management Module	Evidence Presenter Module
Backbone Failover Module	People Counting Module	Video Streaming Module ✓	ANPR Module
Business Intelligence Charting Module	Traffic Enforcement Module	Customized Interface Module	

BACKEND

HEMISPHERE® BACKBONE SERVER

OVERVIEW
KEY HEMISPHERE® FUNCTIONS AT A GLANCE

OPEN SOFTWARE PLATFORM FOR SECURITY AND BUSINESS

- Rule-based correlation of data and video
- Modular structure and flexibility
- Central administration of multiple sites
- Deployment: On-premises, cloud-based or hybrid

- Ressource-efficient operation
- Monitoring of system state and reporting
- Integration and control of third-party systems

VIDEO MANAGEMENT

- Trigger actions or analytics
- Define and initiate backups
- Monitor links or streams and administer statuses
- Analyse low bandwidth video streams
- Export, import and create temper-proof backups
- Activate cameras upon triggering of an alarm
- Receive, evaluate and forward alarm/ incident notifications
- Configure split layouts (e.g., for object tracking)
- Integrate ONVIF-capable cameras

- Set bookmarks in live stream and playback
- Find and analyse movements within a defined timeframe and image area
- Evaluate and analyse people counts in defined areas
- Activate local camera views on central monitors
- Integrate Panomera® multifocal sensor system
- VCA and AI-based video analytics
- 1,500 devices per SeMSy® Main Server
- Unlimited number of SeMSy® Main Servers per system

AVAILABILITY, FAIL SAFETY AND REDUNDANCY

- High availability of integrated modules
- No "single point of failure"
- No downtimes during update rollouts
- Hot standby for Dallmeier recording systems

- Hot standby for the Dallmeier Video Management System (VMS)
- High availability with integrated failover or solutions from third-party providers

DATA MANAGEMENT

- Connect third-party systems (e.g., via OPC, RESTful, API, XML, SOAP, JSON)
- Receive statuses from connected systems and initiate further actions and workflows
- Detect, locate and log incidents, and add further information (text, image, video, audio)
- Georeferencing: Link incidents to exact location data

- Map service: Connection of a map server / publicly available street map / layout
- Adaptable widgets: Represent important data sources and incidents as line, column or circle diagrams
- Prepare and display reports, statistics and analyses from various data sources
- Send and receive Push notifications
- Process and correlate metadata

CYBERSECURITY & DATA PROTECTION

- Connect to a LDAP server and create users manually
- Kerberos authentication and Single-Sign-On with OAuth2
- Comprehensive user rights administration and create tiered security levels
- Two-person authorisation ("dual control principle")
- Simple ADFS implementation

- Set up pixellation
- Encrypt media database and digital signing
- End-to-end encryption of data, video and communications
- Evaluate and export all user actions
- Easily implement firmware and software updates
- System hardening functions
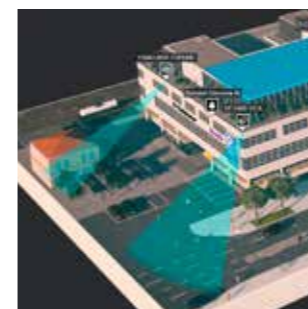
MAP FUNCTIONS

- Control systems via building and floor plans
- Connect map server to publicly available / self-prepared maps
- Use site, building or floor plans (JPG, PNG) as maps

- Actuate third-party systems via active elements and objects
- Automatically import CAD layers

Dallmeier

Dedicated to quality. Driven by passion.

Dallmeier electronic GmbH & Co.KG
Bahnhofstr. 16
93047 Regensburg
Germany

Tel: +49 941 8700-0
Fax: +49 941 8700-180
info@dallmeier.com
www.dallmeier.com

See more.