

Multifocal sensor technology

# PANOMERA®



STADIUM

EN



**Most cost-efficient  
solution available**

## Latest technology for stadium security

Panomera® is a completely novel camera technology, which was specially developed for the all-encompassing video surveillance of expansive areas. With Panomera®, huge widths, as well as areas with large distances can be displayed with a completely new resolution quality, in real time and at high frame rates of up to 30 fps.

With Panomera®, a huge area can be surveyed from a single location, and depending on the customer's needs, the resolution can be scaled nearly limitlessly.





**Zoom right down to the smallest detail**

Zoom with the highest resolution – thus the minute details are identifiable from far distances.



**Permanent recording of the entire image and all details**

Detail with approx. 340 pix/m (104 pix/ft) – distance 100 m (328 ft).

## Everything in view with multifocal sensor systems!

- Permanent overview of the entire scene
- Zoom areas can be selected freely
- Intuitive control with Drag&Drop

Panomera® records the entire scene all the time, even while only a section of the picture is being looked at live. So the operator can carry out his tasks without undue pressure, and without missing anything.

Zoom area can be selected freely

Permanent overview of the entire scene

No switch between cameras necessary

Intuitive control with mouse or joystick



Recording in sunlight



Recording in shade

### Highest image quality in all ranges

Each sensor defines its own **contrast, white balance, exposure, sharpness** and **focus**. This enables the system to deliver a considerably more **effective dynamic response**, and the highest possible image quality for the entire scene.

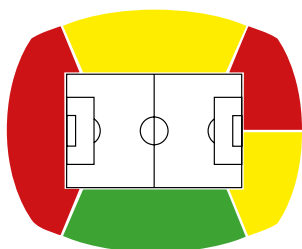
### Prioritisation of critical areas

#### Individual adjustment of the surveillance system to your stadium

With the Panomera® system you can select areas of the stadium and give them a higher monitoring priority, according to your requirements. You can, for example, choose a higher resolution for recording certain sections of the crowd. Likewise, a lower resolution can be chosen for areas that do not require closer monitoring.

#### Prioritisation of critical areas

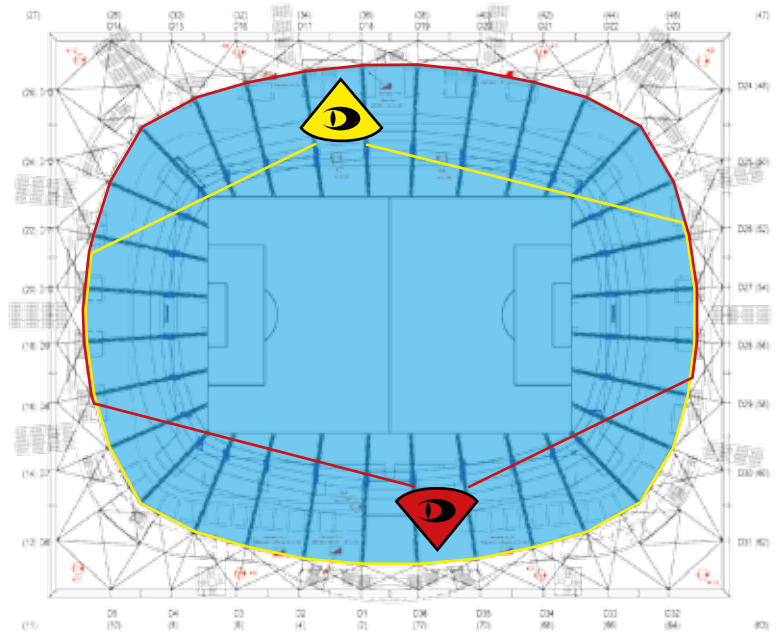
- Standing area
- Guest area
- Critical fan areas
- VIP area



Priority:

- 1
- 2
- 3

#### Specific example of the installation of the Panomera® systems



■ Recording area of the Panomera® camera system

# Panorama® – innovative · unique · cost-effective

## Uniform resolution and consistent depth of focus

Unlike single sensor cameras, multifocal sensor technology utilises several sensors, each of which has a different focal length. Consequently, more distant areas can also be displayed with the same image quality as for objects close to the camera.



## Effective screen splitting – customised aspect ratio

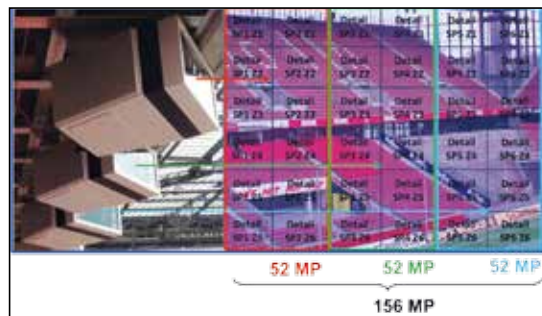


suitable for large stadiums as well as smaller ones.

With multifocal sensor technology, the aspect ratio can be adapted individually: it is not bound to fixed formats such as 16:9 or 4:3. Formats such as 11:5, 4:4 or 8:1 are also possible. This is one of the features that enables Panorama® to be adapted perfectly to any operational area, so that it is

## Cascadability

Multiple Panorama® cameras can be cascaded (up to 360°) and combined to deliver a single image. For the operator, this image always behaves as if it were captured by a single camera.



## Multiuser capability

In contrast to PTZ cameras, with which only one operator can control the camera, with Panorama®, an unlimited number of operators can navigate across the entire scene independently of each other. Although all operators are connected with the same camera, each of the individual users can select their view individually and zoom or pan as they desire.

## Simultaneous live and playback

With Panorama®, the same scene can be viewed in live and playback modes at the same time.



## Bandwidth economy

Panorama® uses H.264 compression and multicast capability for extremely economical bandwidth use (e.g., Panorama® with 15 sensors: 6 Mb/s per stream, that is to say a total of just 90 Mb/s). Connection may be assured with copper or glass fibre cables.

## Transmission to mobile end devices

The mobile solution delivers unsurpassed flexibility and rapid response times via the Panorama® Mobile Communicator. The pictures from the Panorama® can be displayed on an iPhone or iPad, for example, so images of suspicious individuals can be sent immediately to the handheld devices of security personnel in the stadium.



## High degree of availability of recordings

The hallmarks of Dallmeier recording systems are supreme quality and reliability. The highest possible degree of availability is guaranteed by RAID 6 and redundant power supply units. The LGC Forensics certification (formerly Kalagate) ensures that the image material is admissible as evidence in a court of law.



Further information to all of our products can be found at:

[www.dallmeier.com](http://www.dallmeier.com)