



# Content

# The technology The solutions

CORTROL VIDEO MANAGEMENT SOFTWARE	3	CONSTRUCTION SITE MONITORING	12
CORTROL HARDWARE	5	FINANCIAL INSTITUTION	13
AI BOX	6	Gas station	14
GANZ.AI CAMERAS	8	SUPERMARKET	15
AI PIXELMASTER NETWORKRECORDER	9	REMOTE MONITORING	16
POS	10	DEPARTMENT STORE	17
TEMPERATURE MEASUREMENT & MASK DETECTION	11	HOME IMPROVEMENT STORE	18
		PHARMACY	19



- Complete, comprehensive and highly stable solution
- Over 5000 supported cameras and devices
- Intuitive and accessible user interface

## **Available in three software editions**

## GANZ CORTROL Prime



**Up to 16 Channels** 



4K-Ready: CORTROL supportsrecordingandplayback playback functionality with



64bit support ensures optimal use of system resources.

# GANZ CORTROL **Premier**



24 / 48 / 72 / 96 Channels



Automate your video surveillance with the Alarm and Action Manager.



Continuous monitoring of the status of all servers and failover management from the central server.

# GANZ CORTROL Global



**Unlimited number of Channels** 



Combine your video surveillance with third-party software with CORTROL.



Mirrored recording with scheduled transfers ensures the security of your data at all times.



## CORTROL VIDEO MANAGEMENT SOFTWARE

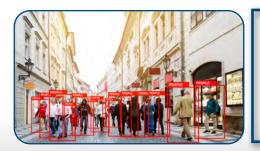


- Scalable and customizable to meet individual requirements
- Comprehensive streaming capabilities
- Settings options for GDPR compliance

## The CORTROL VMS can be supplemented and expanded with additional modules:



CORTROL reliably captures virtually all license plates in the world with its **precise license plate recognition**. The local database stores the license plates along with the image. This makes finding them quick and easy.



**Video analysis functions** enable the software to take an even closer look.

Counting, direction of motion, dwell time and object classification are some of the available extensions that can be realized with CORTROL.



Another form of video analysis is the **recognition of faces**. This can be combined with access control systems, for example, to grant entry only to personnel. Furthermore, market research analyses can be carried out with this.



- Selected premium hardware
- Pre-installed and ready-to-use system
- Efficient and powerful at the same time

## **CORTROL LITE**

- 24 Channels @12Mbps
- Max. 3 HDD
- Pre-Installed CORTROL
- Pre-Installed WIn10 Pro



## **CORTROL ECO 4**

- 24 Channels @12Mbps
- 4 HDD Bays
- Pre-Installed CORTROL
- Pre-Installed Server OS



## **CORTROL ECO 8**

- 48 Channels @12Mbps
- 8 HDD Bays
- Pre-Installed CORTROL
- Pre-Installed Server OS
- RAID





## **CORTROL ECO 16**

- 48 Channels @12Mbps
- 16 HDD Bays
- Pre-Installed CORTROL
- Pre-Installed Server OS
- RAID



## **CORTROL ECO 24**

- 48 Channels @12Mbps
- 24 HDD Bays
- Pre-Installed CORTROL
- Pre-Installed Server OS
- RAID





## **CORTROL ECO 36**

- 96 Channels @12Mbps
- 36 HDD Bays
- Pre-Installed CORTROL
- Pre-Installed Server OS
- RAID





## AI BOX





#### Die intelligente Erweiterung für jedes System

- · Deeplearning based 'artificial intelligence'.
- Various Al video analytics packages
- Can be used for surveillance, business intelligence, access control, loss prevention, etc.
- Compatible with existing VMS, NVR/DVR and alarm systems based on Onvif
- Intuitive user interface



#### **Heat-Map**

Know where, when and how long someone has been. This data can be used to optimize the layout of the store.



#### Zones for precise detection

Setting up different zones ensures more accurate detection. In this example, strolling passers-by in front of the shop window would be ignored. Only what happens in the store counts.



#### Zone setup

Different types of detection zones or lines can perform different functions. These include, for example, counting or the detection of dwell time.

#### **Customizable solution**

With the AI BOX, further scenarios can be controlled and evaluated. For example, it can detect whether a helmet is being worn or not. A more precise determination of vehicles, living beings and clothing can also be implemented. For this purpose, the AI BOX is programmed to the corresponding conditions.

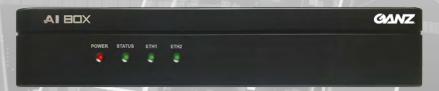


The AI BOX recognizes the wearing of Protective clothing and safety helmet

When the line is crossed, an alarm event is triggered

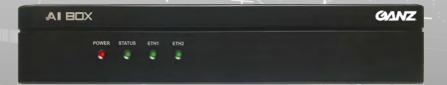
#### **Example from practice**

To drastically reduce false alarms, a "boundary line" can be drawn, as shown in the adjacent picture. This makes it possible to determine whether a person has successfully crossed the fence. The performance of the AI Box is further demonstrated by the fact that even under these difficult lighting conditions, the person is clearly marked.



#### **ZN-AIBOX16**

- Up to 16 streams
- Supported protocols: RTSP / ONVIF
- · Maximum 400 frames per second
- 4 alarm inputs
- 1 alarm output
- GBit LAN interface



#### **ZN-AIBOX4**

- Up to 4 streams
- Supported protocols: RTSP / ONVIF
- Maximum 100 frames per second
- 4 alarm inputs
- 1 alarm output
- GBit LAN interface

## AI GANZ CAMERAS



- GANZ IP cameras with outstanding image quality
- Al and Deep Learning
- High quality materials and robust workmanship

Depending on the purpose, the right tool - here the right camera. Whether indoor or outdoor, wide angle, swivel, rotate and tilt: We find the right model.

You can find an overview of our most popular cameras here. The following applies: We rely on state-of-the-art and reliable technology with expandable Al functions.



#### Bullet - ZNP-B5M212DP

- Focal length 4.0mm
- 5 megapixel sensor
- Horizontal angle of view 95.9°-29.8
- Al licenses optional



#### Dome - ZNP-VD5M212DLP

- Focal length 2.8mm 12mm
- 5 megapixel sensor
- Horizontal angle of view 95.9°-29.8
- Al licenses optional



#### PTZ - ZN8-P5X40DL-H

- Focal length 4.98 ~ 199.2mm
- 5 megapixel sensor
- Horizontal angle of view 59.1° ~ 1.8
- Suitable for outdoor mounting



#### Bullet - ZNC-B5M212DP-V

- Focal length 2.8mm 12mm
- 5 megapixel sensor
- Horizontal angle of view 95.9°-29.8°
- Suitable for outdoor mounting



#### Minidome - ZNC-VD5F28DL-V

- Focal length 2.8mm
- 5 megapixel sensor
- Horizontal viewing angle 101.8
- Suitable for outdoor mounting



#### Dome - ZNC-VD5M212DLP-V

- Focal length 2.8mm 12mm
- 5 megapixel sensor
- Horizontal angle of view 95.9°-29.8°
- Suitable for outdoor mounting



#### PTZ - ZN8-P5X12DL

- Focal length 4.7 ~ 56.4mm
- 5 megapixel sensor
- Horizontal viewing angle 60.9°~ 6.43°
- Suitable for outdoor mounting

## AI PIXELMASTER NETWORKRECORDER

## PIXEL BE MASTER

- 4, 8 and 16 channel recorders
- Plug & Play with GANZ PixelPro cameras
- App for iOS & Android



#### PixelMaster Netzwerkrekorder - Die ideale Stand-Alone-Lösung

The PixelMaster network recorders are perfect for smaller installations. There is no need to do without a comprehensive range of functions. On board: A clear and accessible user interface, convenient setup wizards and a resolution of up to 4K. Especially in combination with the PixelPro cameras, numerous functions can be set up directly via the recorder.

functions can be configured directly via the recorder. This makes the the central interface in the system, for which we have the highest highest demands on performance and reliability.



#### Live View

Thanks to the high resolution of up to 4K, you also get a razorsharp resolution on the live monitor and always keep the overview.



#### **App for iOS and Android**

The free app provides convenient access to the Pixelmaster while on the move. In addition to the live view, it is also possible to search the archive.



#### **Browser and DMS**

Via PC you have the choice: Either via browser or by means of the free DMS software you can enjoy the high functional range of the record.



#### Archive search

Numerous search options let you find the corresponding event quickly and purposefully. Thumbnails are one option to make it easier to find the event.

## **POS**

In addition to pure video surveillance, a modern and powerful system can take on further tasks. The implementation of POS data in the corresponding video image is still an important extension.

Corresponding interfaces have been standardized for some time and can also be found in current IP systems. The adaptation to POS systems is also simple. Regardless of whether the POS data is to be displayed via the Cortrol management software or via the Pixelmaster network recorder: the allocation, display and storage is always decisive.

Depending on the system, it is possible to search for and evaluate the POS data in the result. We would be happy to advise you in advance to find the optimal solution for your POS system.





## ...and data protection?

Especially when it comes to payment processing, the data protection requirements are high.

Therefore, it is important that the devices and software used together are able to offer all the tools to set up the system in compliance with the GDPR.

Planning, setup, documentation and test run are necessary steps for the operation of the system. While the initial setup may be laborious, once everything is comprehensively set up and all rules are created, no further control is needed.

## TEMPERATURE MEASUREMENT & MASK DETECTION

The EN7-S02T-W is an AI ultra-precision body temperature measurement system that guarantees high performance and reliability. It is based on infrared thermal imaging technology and relies on deep learning algorithms.

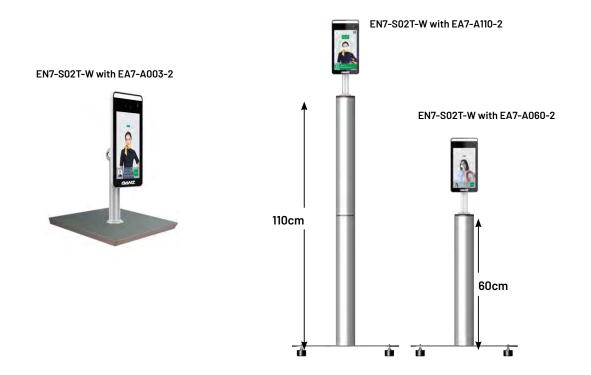
It has fast recognition speed, high precision and rapid acquisition of facial information for 1: N comparison. During face recognition, the human body temperature is determined for temperature measurement.

The system can be used, for example, at personnel passageways. A high passage speed is achieved here, with simultaneous epidemic prevention.

Thanks to the network integration, the EN7-S02T-W can be integrated into your existing access control system.









## **C**ONSTRUCTION SITE MONITORING

A construction site has its own unique requirements; it requires rapid deployment of safety systems as well as mobility and fast commissioning. It also requires that false alarms are kept to a minimum. This is an area where GANZ.AI can help with its capabilities of easy setup and quick reconfiguration. The strong AI capabilities during the night are also helpful.

- Quickly ready for use
- Reduces false alarms
- Avoids theft and vandalism
- For security and order





## FINANCIAL INSTITUTION

Among - if not the first - to start installing surveillance equipment: Financial institutions. They are still among the most convinced users of security systems. The full potential of a comprehensive solution concept comes into play here. Video surveillance, alarm systems and access control are the minimum. In addition, intelligent systems are needed that can react to typical situations in a more targeted manner. Video analysis is a suitable tool for fine-tuning and optimization in this context. In addition, the DSGVO plays a disproportionately greater role in banks. This is another reason why consulting and planning are crucial in order to be able to implement a targeted and reliable system.



## **G**AS STATION

Monitoring solutions for service stations require particularly precise planning and preparation of a requirements profile. Even if all of them seem to be built in the same way, there are still numerous deviations and individual solutions.

For example, the sales areas are not only different in size, but always have an individual layout. Some service stations have a car wash and service station; some also have rooms with repair facilities. A café, restaurant or restroom are also sometimes available. In addition, there are parking facilities, storage rooms, break rooms and staff areas.



This results in various approaches to the creation of a holistic concept, in which we are at your side from the very beginning. Regardless of whether it is a new installation or the modernization of an existing facility.

L1 Camera surveillance

**L2** POS system connection

L3 License plate recognition

**L4** Access control

**L5** Al Video analysis



## **S**UPERMARKET

The supermarket - a complex construct whose appearance is subject to constant change. Customers with their very own wishes, deliveries, new items and offers: There is always life in and around the supermarket. All this requires perfect organization and structure. This should be reflected in the monitoring system and also process the data that the store supplies.

Keeping an eye on everything at all times is something no one can do. It is therefore all the more important to have a system that provides answers to crucial questions. For example, the number of customers can be counted quite easily. It is also possible to determine the waiting times at the checkouts. In addition, it is possible to see how strongly or how weakly individual areas of the store are frequented.

All of this means that corrections and optimizations can be initiated and carried out at various points in order to guarantee the best possible shopping experience at all times. Of course, the classic task of the security system remains just as important, namely the protection of valuable goods and merchandise.

on offer

# SAFETY & CARGO PROTECTION HEAT-MAP & MARKETING WAITING TIMES & LAYOUT





Remote Monitoring Companies have to deal with a lot of alerts, action and attention. Still, handling false alarms cost a lot of time, is frustating for employees and of course causes costs.

GANZ.AI can help: With superiour performance in terms of detecting difference between humans, animals and objects as well as traffic, great performance even at night or bad wether conditions, reduction of false alarms is noticeable.

- Improve operator efficiency
   Raise Effectivity
  - Reduce False Alarms
     Reduce Cost

## **DEPARTMENT STORE**

Numerous, partly high-quality goods, direct contact with this from the customer, because it is desired that this is also tried out: There is a lot to consider in order to ensure optimal visual coverage of the cameras.

Sometimes, however, it is a disadvantage if customers feel they are being watched. In addition, the design, character and flair of the store should not be disturbed too much by technology of any kind. Therefore, it is of great advantage to rely on our high-resolution cameras. These do not necessarily have to be close to the action. Because with our cameras it is possible to digitally zoom into the image afterwards and at the same time keep an outstanding image quality.

Especially where a more direct relationship between people and merchandise is to be established, it is important to analyze the store's data. For example, the arrangement and design of the merchandise can be adapted to the age structure and gender. In the online store, the use of these tools is already normal - so stationary retail should also make use of this information.

## Overview • Goods protection • Target group analysis • Design





## HOME IMPROVEMENT STORE

"Spooky, huh? Here's everything!" was a famous saying from a well-known movie. Almost the same applies to a DIY store.

The range of products for (home) improvement, building & construction, gardening & landscaping, design & architecture, cars & accessories...the long aisles and high shelves are as endless as the list of products on offer. All of this should be comprehensive and under control around the clock. Quite a lot to ask of a person - after all, there is the terrain all around and the parking lot. With competent planning and implementation, however, this can also be achieved - with our technology.

DIY stores in particular thrive on seasonal offers, whether it's the gardening and barbecue season or preparing for the

battle against leaves and branches. This makes it all the more crucial to use all the means at your disposal

to find out and optimize the optimum positioning of goods in the DIY store. This is where

heat-map technology can help.

The generous supply of all kinds of goods, accessories and small parts requires monitoring. Moreover, thanks to our high-resolution cameras, the number of them to be used is not as high as one might think.

## L1 Control

**L2** Monitoring

L5 Layout

**L4** Personnel requirements

L3 Al Video analysis

## **PHARMACY**

Sensitive areas such as pharmacies also require protection and security. With our concepts and solutions, discreet and comprehensive control can be achieved at the same time. This means that daily operations are not impaired.

In most cases, a compact system is sufficient for a pharmacy - and yet it is not necessary to do without a comprehensive range of functions. For example, the cash register connection works just as well as the integration of other systems that provide additional protection for certain particularly sensitive areas.

Each of our systems also offers access via app - if desired. Even to multiple locations. This guarantees control, of course at any time of day and practically from anywhere in the world.



- **L1** Security
- **L2** Checkout connection
- L3 Flexible
- **L4** Discreet
- L5 Intuitiv





#### **CBC (Europe) GmbH**

Fritz-Vomfelde-Str. 6
D-40547 Düsseldorf
T: +49-(0)211 53 06 70

F: +49-(0)211 53 06 71 80 info@cbc-europe.com

www.cbc-europe.com

#### CBC (Poland) Sp.z.o.o

Oddzial w Warszawie
ul. Anny German 12
PL-01-794 Warsaw
T: +48-(0)22 6 33 90 90
F: +48-(0)22 6 33 90 60
info@cbcpoland.pl
www.cbcpoland.pl

#### **CBC Russia Moscow Rep. office**

Office 503B World Trade Center
12 Krasnopresnenskaya nab.
RU-123610 Moscow
T: +7-495 258 2161
F: +7-495 258 2160
info@cbc.ru
www.cbc.ru

## **CBC (Europe) Srl** via Umberto I, 69

20814 - Varedo (MB) T: +39-0362 36 50 79 F: +39-0362 4 00 12 sales@cbceurope.it www.cbceurope.it

#### CBC (Europe) GmbH UK Branch

Churchill House, Suite 81 137~139 Brent Street London NW4 4DJ T: +44-(0)20 87 32 33 00 info@cbcuk.com www.cbceurope.com

ganzsecurity.eu

CBC (Europe) GmbH - Technical changes and errors excepted. 042021 v1.0