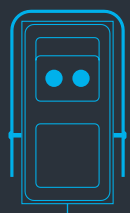
eyeFOUR

Modular Platform Camera

eyewatch

eyeFOUR - At a glance



PLATFORM

eyeFOUR offers powerful image pre-processing and a platform for third-party algorithms. Both in software and hardware, the camera offers customization options to deliver optimal results for the application.

REDUCED INFRASTRUCTURE

As an Edge-Intelligence camera, the evaluation and processing of the video analysis takes place directly in the camera. This reduces the amount of data and thus the infrastructure requirements.

MODULAR AND FLEXIBLE

The performance of the camera can be extended modularly. Various function modules, such as an Intel® Movidius™, can be connected to the camera via USB.

SEAMLESS DOCUMENTATION

The built-in battery-buffered clock guarantees chronologically correct and time-accurate event storage even without a network connection.

DIGITAL SIGNATURE

The eyeFOUR's digital signature enables a clear assignment between stored data records and the respective camera. The cryptographic procedures used ensure tamper-proof data transfer.

CONNECTED SYSTEMS

Integration has never been so easy - because it is already prepared. Every eyewatch camera can easily be connected to other deister electronic systems via plug & play.

eyeFOUR

One Camera, all the Possibilities

eyeFOUR's concept is to serve as a platform for innovative solutions that address real-world challenges in applications such as parking management, transportation, access control and more.

The camera can be modularly adapted to the specific requirements - both in terms of hardware and software. The aim of eyeFOUR is to offer a powerful platform that can be optimally configured for the application to reduce false alarms and produce the best results.

The modular design of the eyeFOUR allows for the integration of application-specific image sensors and optics. The eyeFOUR also features integrated high-performance IR LEDs, flash memory and a USB interface for optional feature modules.

The eyeFOUR was designed as an "Intelligent Vision Sensor" camera. Qualified algorithms based on artificial intelligence can be used for different tasks: Perimeter surveillance, object and people identification or license plate recognition.

The eyeFOUR is a an Edge-Intelligence camera. It does not need a central server, complex infrastructure or downstream video processing. Everything happens in the camera.

All relevant settings for the configuration of the camera's image parameters and the targeted adjustment of the installed applications properties can be set conveniently via the web interface, which is hosted on the camera itself. The web interface also offers the option to display and search for events that are stored directly in the camera. The live view clearly displays all essential information about the image area and the latest events.

- Image processing and data storage directly in the camera
- Application specific algorithms based on AI
- Embedded Linux OS
- Application-specific image sensors and optics
- Powerful and energy-efficient embedded platform
- Integrated high-power IR LEDs
- Integratable into the entire deister solution portfolio

eyeDATA
Technical Data

GENERAL	
Dimensions	124 x 212 x 100 - 180 mm
Weight	2.0 kg
Protection class	IP65
Material	Aluminum
Operating temperature	-20…+55°C
Storage temperature	-40…+70°C
Humidity	5...95% relative humidity, non-condensing
Integrated memory	16 GB
IR LED	≤ 5 watts
Mounting	Mast and wall mounting
Power requirement	24 VDC or POE+
Power consumption	≤ 20 watts

CAMERA	
Lenses	M12, application dependent focal length
Image sensors	Application-dependent selection, integration of different sensors in one camera module possible

VIDEO ENCODING	
Compression	H.264 and MJPEG
Resolution	up to Full HD

HARDWARE

- Powerful embedded platform
- Real-time data processing
- Integration of application-specific image sensors and optics
- Image processing and data storage directly in the camera
- Efficient customer adaptations through modular design
- Ethernet and RS485 outputs
- Connected System Integration into the deister product portfolio via deBus (e.g. RFID readers)

SOFTWARE

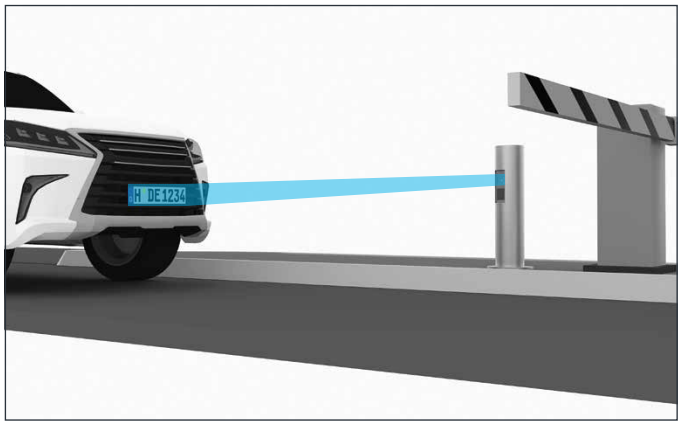
- Easy to use user interface with all important information at a glance
- Secure remote access via Web GUI
- Event logging in internal memory
- Application-oriented software platform
- Embedded Linux OS
- AI-based applications for use on the eyeFOUR camera
- One platform, multiple applications: ANPR/ALPR, Object Detection, Person Recognition, ...

eyeAPPLICATIONS

Powerful Applications

Access Control

eyeFOUR automatically captures the license plate in real time, compares or adds it to a predefined list, and then takes appropriate action such as opening a gate or generating an alarm. The integrated high-power IR LEDs with a range of up to 20 m enable operation even in very low light conditions.



Traffic Monitoring

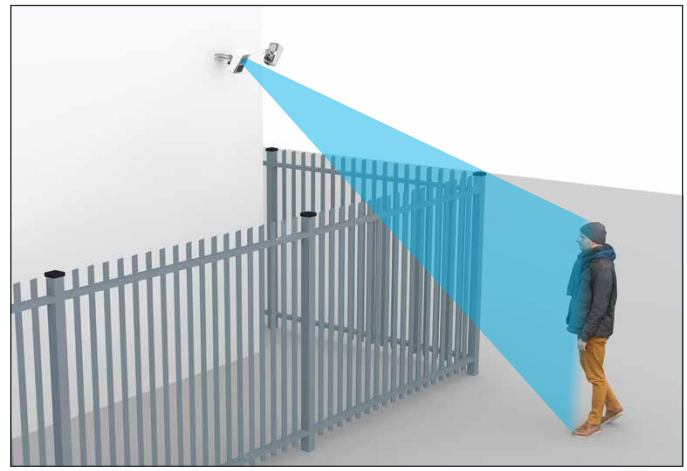
To ensure that only authorised vehicles move in the monitored areas, warnings based on license plate recognition can be issued when a blacklisted vehicle passes by. In addition to the license plate, the vehicle type, e.g. car, truck or bus, can be classified to make identification even more reliable.

Toll Control

Ensure smooth traffic at toll stations and on roads. Fast and reliable identification of license plates ensures good traffic flow and reliably records vehicles for accurate billing.

People Identification

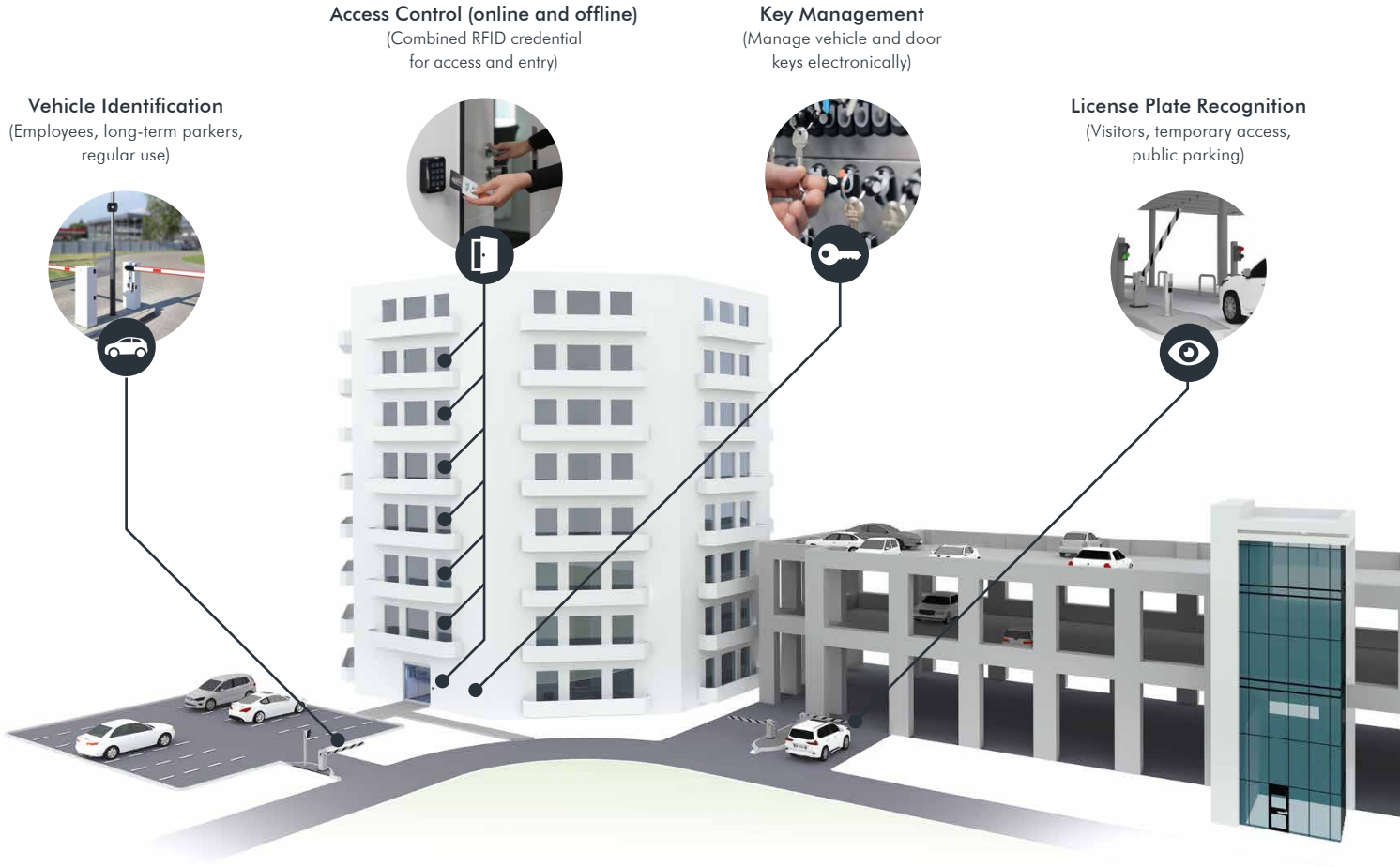
Due to their richness of detail, outdoor scenarios require efficient camera algorithms for reliable identification of people in the camera's field of view. Especially in security relevant environments, people identification is a basic requirement to ensure comprehensive protection and security.



Connected Systems

The Benchmark in Terms of Integration

The eyewatch cameras can be seamlessly integrated into the entire deister electronic „Connected Systems“ portfolio. From access control, smart storage and electronic key cabinets to vehicle identification, everything can be managed centrally with one software package. The entire system is automated with powerful workflows. One example would be fleet management. It can be defined that all drivers not only need an access permit, but must also properly remove and return the vehicle keys from the electronic key cabinets so that the camera opens the barrier at the entrance and exit. Comprehensive reports, in which all events from all systems can be presented together in chronological order, provide a seamless overview of all processes and procedures in the system. Even pictures and video material can be included in the report.



eyewatch

A deister electronic GmbH Company

eyewatch develops and produces intelligent IP video systems based on the Edge Intelligence concept. The platform concept and the decentralized intelligence of our camera system are always at the center of attention.

As a startup, we belong to the deister group of companies, whereby a seamless integration with the existing deister solution portfolio extensively expands the application possibilities of our cameras.

For more than 40 years, deister electronic has been an internationally modern and sustainably managed family-owned company with headquarters in Barsinghausen. We develop secure automation solutions that enable our customers to automate processes, reduce operating costs and increase security levels.

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