Remote control of vehicles for all industries

Teleoperation enables the operator to monitor and control multiple vehicles independently to their location.

Teleoperation centre is able to service hundreds of operators and vehicles at the same time. Intelligent driver management allows us to effectively allocate free drivers. Detailed overview of the status of the entire fleet is ensure by our fleet management. Unique camera and stream modules, through which you can see the space around the vehicles, can be scaled per the need of the vehicle and its use.

Our system of remote control allows us to operate any kind of vehicle. Whether you are an agricultural or a delivery company, or you have a warehouse and lack of skilled workers, we have a solution for you.

SECURE SOLUTION

- Encrypted communication
- Reliable and redundant connection
- Secure interface between the vehicle and teleoperation is ensured by a specialized unit

DESIGNED FOR SAFE DRIVING

- Low latency
- Precise control over the vehicle
- Minimal image distortion
- Augmentation of additional information into the image
- Safe anti-collision procedures (roboSHIELD)

Application in many different sectors

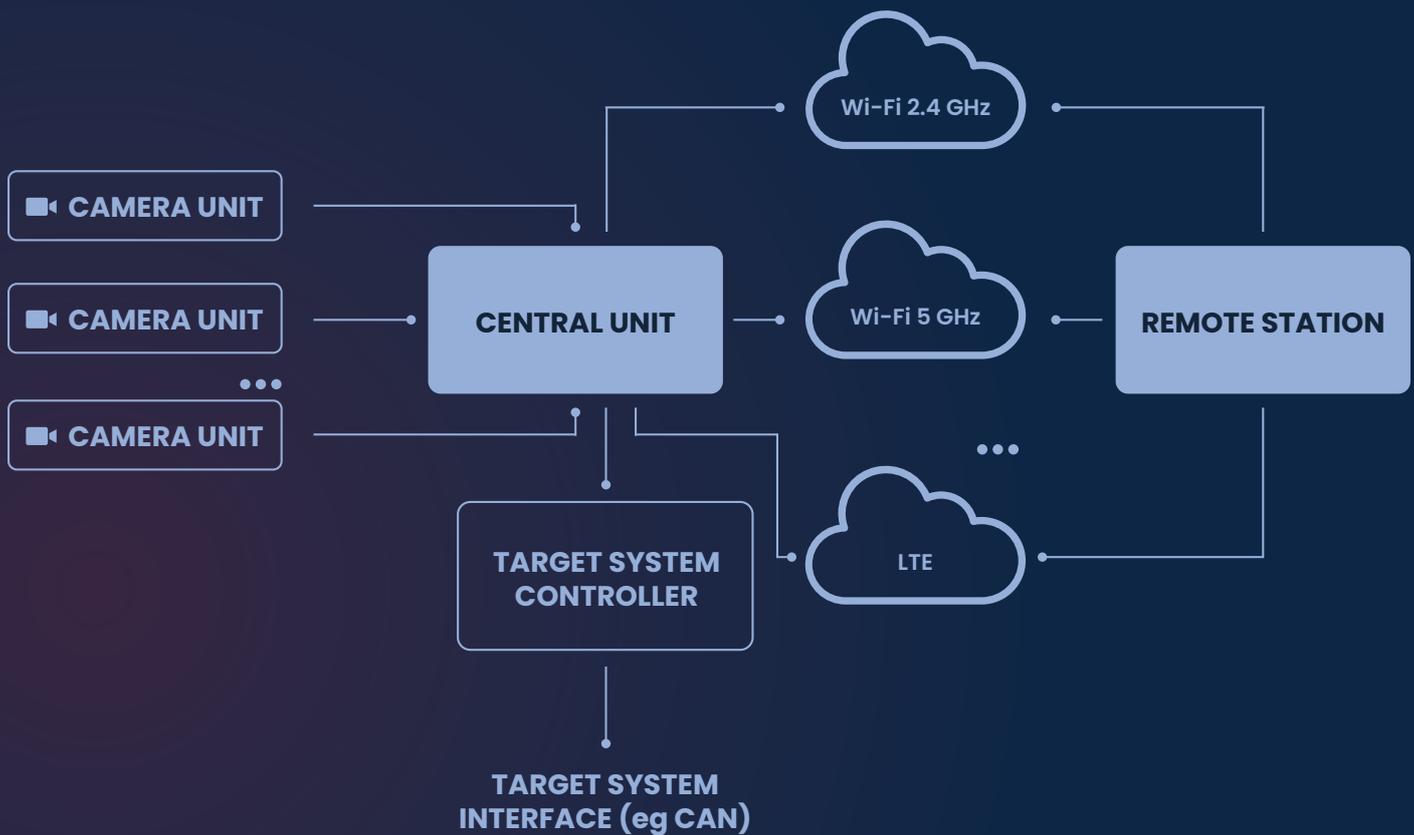Transportation

Delivery

Agriculture

Airports

Warehouses and production

Cleaning equipment

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  │  CAMERA UNit │                              │   Wi-Fi 2.4 GHz │
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  │  CAMERA UNit │────────│ CENTRAL UNIT │──────│   Wi-Fi 5 GHz   │─────│REMOTE STATION│
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  │  CAMERA UNit │         TARGET SYSTEM          LTE
  └──────────────┘         CONTROLLER
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How do the devices interconnect?

Camera module

It is composed from a camera and a management module, which uses a CSI-2 interface. It is possible to interconnect with a converter to an HDMI connector, which allows us to place the camera independently relative to the management module. An ethernet cable is used to connect to the central management module.

Central management module

Control the flow of the entire system which, in practice means, that it sends the image to the remote station. It communicates with the control of the devices and forwards instructions. It collects up-to-date information about the device and transmits it to fleet management.

Communication driving module

Serves for communication with the target device. An ethernet interface with driving instructions is provided from the side of the module, which are then forwarded directly to the target device. For example via a CAN bus.

Remote station

The target device is controlled by an operator in his workstation using a remote station. The operator can see all of the camera streams and control the device comfortably and steadily. Control elements can be adjusted to the needs of the target device.

Fleet management

Displays information about all of the logged devices. Helps you monitor and manage your fleet. Additionally, it serves for initializes the remote control connection.

Server (gateway)

Network communication unit which interconnects all of the modules. Verifies the operator's credibility to ensure secure registration to the system.