# TARVOS UGV
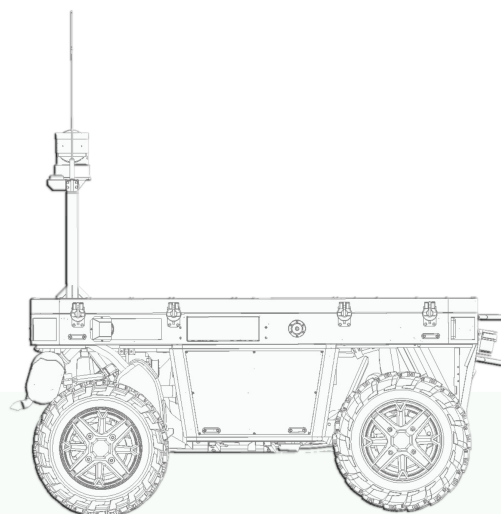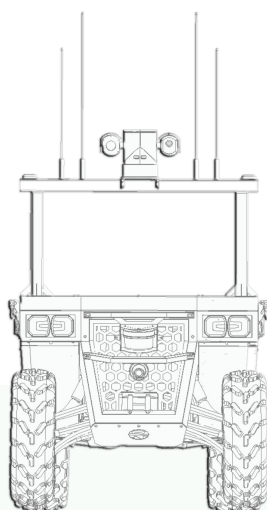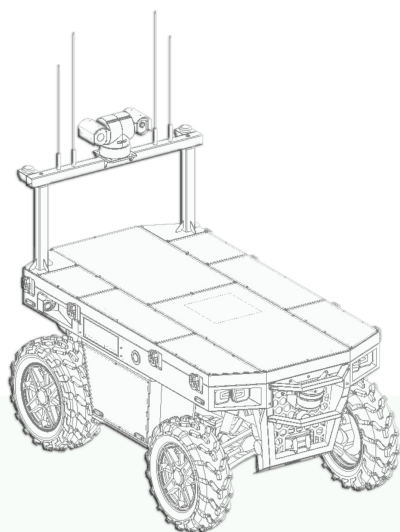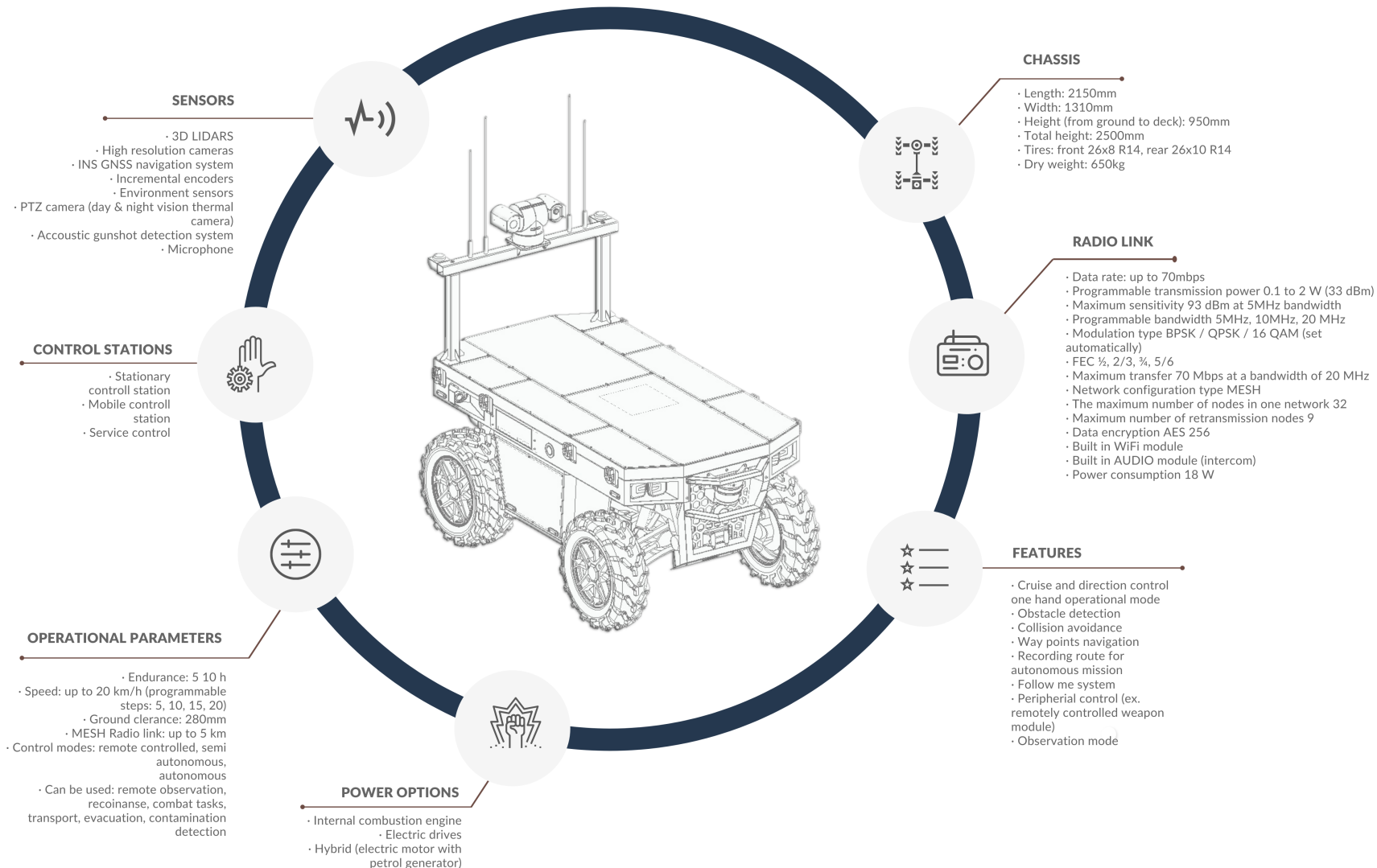
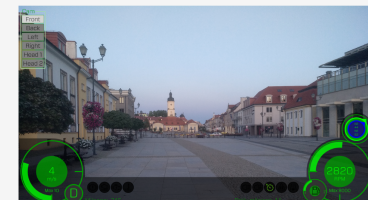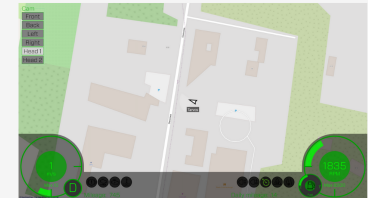**ROBOTYKA I TECHNOLOGIE PRZYSZŁOŚCI**

# TARVOS UGV LINE

Tarvos Cargo S90 line is based on a factory-manufactured chassis from mass-produced vehicle. It is equipped with precise control system of the platform supporting diagnostics of the all main drives, sensors and install peripheral modules. Developed body along with the necessary modifications allows to install all electronic devices controlling remotely the vehicle, sensors, radio transmitters, cameras and an optoelectronic surveillance head. Tarvos Cargo can carry out reconnaissance, support evacuation as well as many other tasks installing additional equipment like weaponized modules.

## KIT CONTENT:

- Disply 10"
- Safe Remote Control Pad
- Mesh radio system transceiver /retransmitter
- Integrated keyboard and control buttons
- WIFI
- small antennas
- equipped with control application for Tarvos line



## SENSORS

· 3D LIDARS
· High resolution cameras
· INS GNSS navigation system
· Incremental encoders
· Environment sensors
· PTZ camera (day & night vision thermal camera)
· Accoustic gunshot detection system
· Microphone

## CONTROL STATIONS

· Stationary controll station
· Mobile controll station
· Service control

## OPERATIONAL PARAMETERS

· Endurance: 5 10 h
· Speed: up to 20 km/h (programmable steps: 5, 10, 15, 20)
· Ground clerance: 280mm
· MESH Radio link: up to 5 km
· Control modes: remote controlled, semi autonomous, autonomous
· Can be used: remote observation, recoinanse, combat tasks, transport, evacuation, contamination detection

## POWER OPTIONS

· Internal combustion engine
· Electric drives
· Hybrid (electric motor with petrol generator)

## CHASSIS

· Length: 2150mm
· Width: 1310mm
· Height (from ground to deck): 950mm
· Total height: 2500mm
· Tires: front 26x8 R14, rear 26x10 R14
· Dry weight: 650kg

## RADIO LINK

· Data rate: up to 70mbps
· Programmable transmission power 0.1 to 2 W (33 dBm)
· Maximum sensitivity 93 dBm at 5MHz bandwidth
· Programmable bandwidth 5MHz, 10MHz, 20 MHz
· Modulation type BPSK / QPSK / 16 QAM (set automatically)
· FEC ½, 2/3, ¾, 5/6
· Maximum transfer 70 Mbps at a bandwidth of 20 MHz
· Network configuration type MESH
· The maximum number of nodes in one network 32
· Maximum number of retransmission nodes 9
· Data encryption AES 256
· Built in WiFi module
· Built in AUDIO module (intercom)
· Power consumption 18 W

## FEATURES

· Cruise and direction control one hand operational mode
· Obstacle detection
· Collision avoidance
· Way points navigation
· Recording route for autonomous mission
· Follow me system
· Peripherial control (ex. remotely controlled weapon module)
· Observation mode

## ROBOT CONTROL APPLICATION



Robot Control Application was developed under project "Perun" co-financed by the National Center for Reseearch and Development: "Autonomous wheeled vehicle with ad armored module for reconnaissance and combat tasks" by consortium:ZM Tarnow, STEKOP, Military University of Technology.

# TARVOS UGV LINE

### TARVOS CARGO S90





### TARVOS ELECTRIC

### PERUN





### PERUN EQQUIPED WITH ROCKET LAUNCHER

Perun was developed under project co-financed by the National Center for Reseearch and Development: "Autonomous wheeled vehicle with an armored module for reconnaissance and combat tasks" by consortium: ZM Tarnow, STEKOP, Military University of Technology.

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