

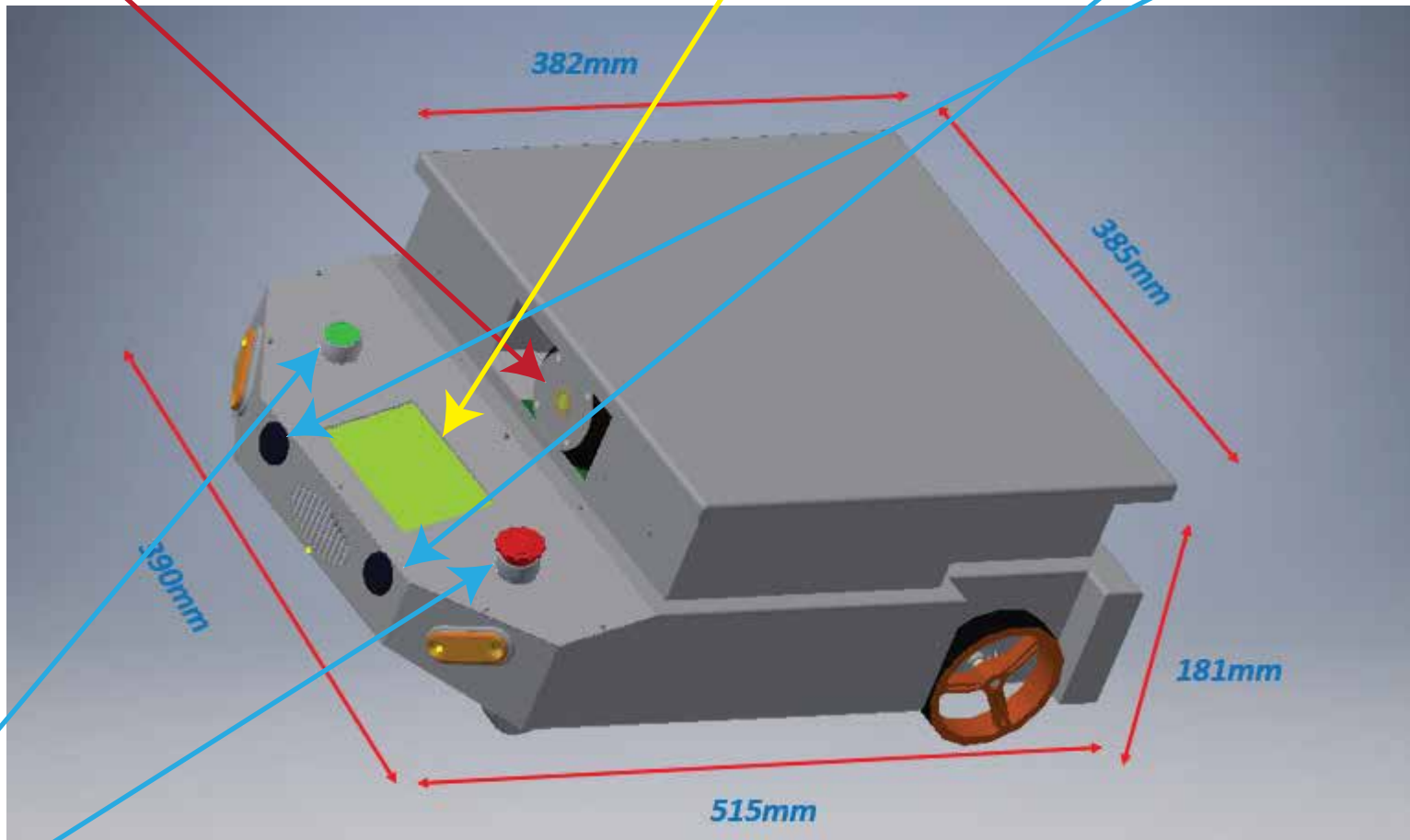
AGV Presentation

Hardware

Camera for monitoring easier

Touchscreen for manual configuration and display operating data

Sensors for avoiding obstacles



Start/Emergency Stop button

IoT Project | Automated Guided Vehicle

A robot with manual and auto operation modes which is used to transport packages from the warehouse to production lines

- * Get the package from operation staff, then transport to the desired production line by defined route on the floor via sticked RFID cards

- * Intergrated navigation system with multi methods: RFID card, Bluetooth Low Energy stations

- * Provide monitoring and controlling User Interface via web app with API endpoints for intergrating with other systems like MES

- * Can be combined with robotic arm to make fully automated warehouse solution from picking, sorting, storing and transporting packages

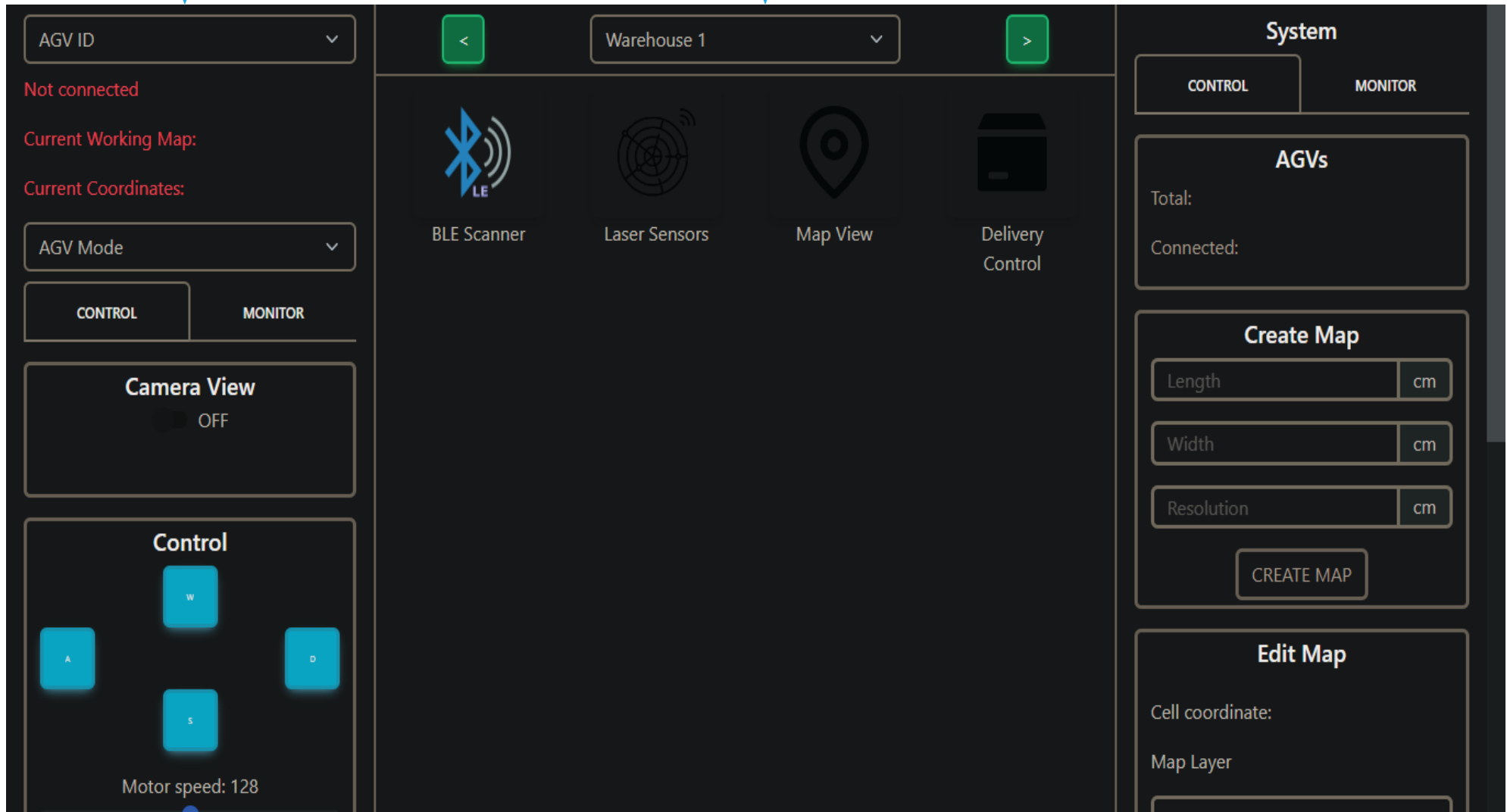


User Interface

Control panel

Main panel for display
map and informations

System panel for display
AGVs status



The UI is divided into three main vertical sections. The left section (Control panel) contains an 'AGV ID' dropdown, status indicators for 'Not connected', 'Current Working Map', and 'Current Coordinates', an 'AGV Mode' dropdown, 'CONTROL' and 'MONITOR' tabs, a 'Camera View' section with an 'OFF' toggle, and a 'Control' section with directional buttons (A, W, D, S) and a 'Motor speed: 128' display. The middle section (Main panel) features a 'Warehouse 1' dropdown, navigation arrows, and four large icons: 'BLE Scanner', 'Laser Sensors', 'Map View', and 'Delivery Control'. The right section (System panel) has a 'System' header, 'CONTROL' and 'MONITOR' tabs, an 'AGVs' status section with 'Total' and 'Connected' labels, a 'Create Map' section with input fields for 'Length', 'Width', and 'Resolution' (all in 'cm') and a 'CREATE MAP' button, and an 'Edit Map' section with 'Cell coordinate' and 'Map Layer' labels.

AGV ID ▾

Not connected

Current Working Map:

Current Coordinates:

AGV Mode ▾

CONTROL

MONITOR

Camera View

OFF

Control

A

W

D

S

Motor speed: 128

<

Warehouse 1 ▾

>

BLE Scanner

Laser Sensors

Map View

Delivery Control

System

CONTROL

MONITOR

AGVs

Total:

Connected:

Create Map

Length

cm

Width

cm

Resolution

cm

CREATE MAP

Edit Map

Cell coordinate:

Map Layer