

UNMANNED GROUND VEHICLE

PREPARED BY:

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HUSKY UGV ROBOT

Husky is a tough unmanned ground vehicle designed for robotics research in outdoor environments. Its all-terrain tires and powerful motors allow it to conquer snow, sand, mud, and steep hills.

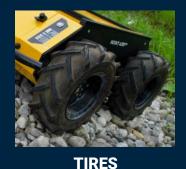
FEATURES

- Easy to use
- Rugged & all-terrain
- A trusted benchmark
- Precision control
- Customizable

ROBOT BODY DESIGN



BODY MATERIALSStandard slotted aluminium frame



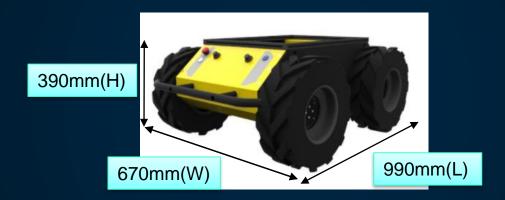
12in lug-tread tires and 4x4 drive for extreme terrain



Compatible with wide range of robot acessoriies

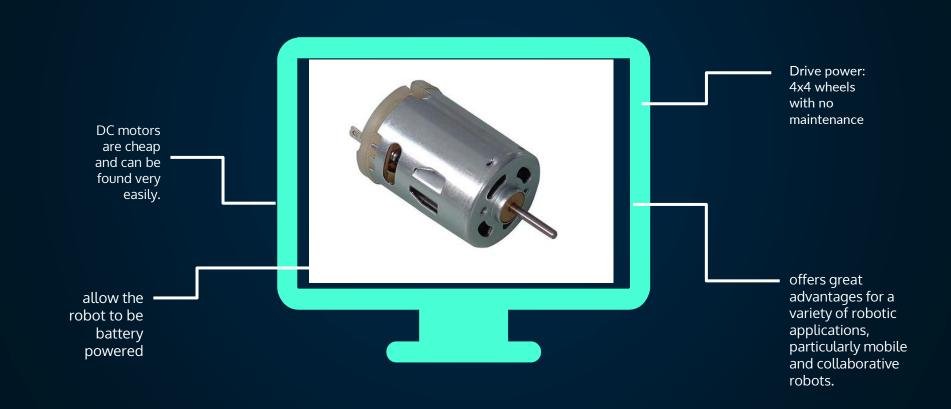
CUSTOMIZABLE

DIMENSION OF THE ROBOT



Weight: 50kg

ACTUATOR



NAVIGATION SYSTEM AND CONTROLLER



IMU

Embeds low noise gyroscopes and accelerometers to deliver optimal performance in applications where precision and robustness matter in all conditions.



INTERNET PROTOCOL CAMERA

A type of digital video camera that receives control data and sends image data via an IP network.





WHEEL ODOMETRY SENSOR

the use of motion sensors to determine the robot's change in position relative to some known position.



GPS

A satellite-based navigation system made up of at least 24 satellites. GPS works in any weather conditions.



50m SICK LMS-151 LIDAR

Adopts the mature laser-time-of-flight principle, non-contact detection, and incorporates the latest multiple echo detection technology



MINI ITX

Commonly used in small-configured computer systems. Originally, they were a niche product, designed for fan-less cooling with a low power consumption architecture

Data Collection

Quantification and mapping

LIDAR sensor allows long distance terrain quantification and mapping



Surveillance

A pan-tilt-zoom IP camera permits teleoperation at long distances.



Data Transmission



RS232 Cable

Standard protocol used for serial communication

POWER SYSTEM MANAGEMENT



24-V 20-AH SEALED LEAD-ACID BATTERY



8 hours on standby, 3 hours on nominal usage

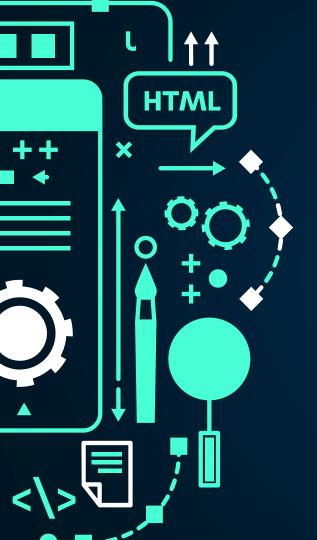


4 hours charging time



Onboard: 5-V, 12-V, and 24-V power supply for user payload.





THANKS!

