MOOSE™

AMPHIBIOUS UNMANNED GROUND VEHICLE

CLEARPATH ROBOTICS™

RUGGED & VERSATILE

Moose is engineered to go where no other robot can. Its rugged, lightweight steel and aluminum build gives it low ground pressure and traction to tackle all types of difficult terrains. With optional bilge pumps and an IP rating of 67, Moose is amphibious and weather-proof, capable of moving through water at speeds up to 5 km/hr.

ROS READY

Moose comes with the open-source Robot Operating System (ROS) preinstalled and configured. Rich demos and tutorials are provided, along with a 3D simulation model for Gazebo to help you get started quickly and hassle-free.

DESIGNED FOR RAPID CUSTOMIZATION

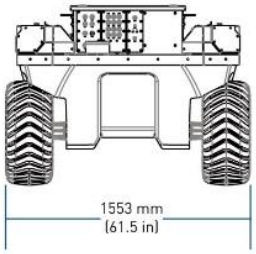
When research changes, so should your hardware. Integrate third-party sensors and manipulators quickly and easily with flexible payload mounting, easy to access power and reconfigurable I/O. Mobile robot prototyping has never been faster or easier.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS

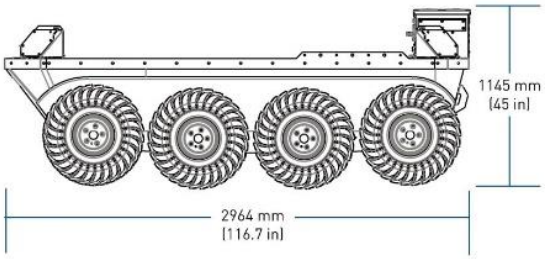
MIT Massachusetts Institute of Technology · University of Waterloo · Carnegie Mellon University · Georgia Institute of Technology · Cal · University of Toronto · WPI

Contact us today for pricing and a free 30 minute technical assessment: 1-800-301-3863

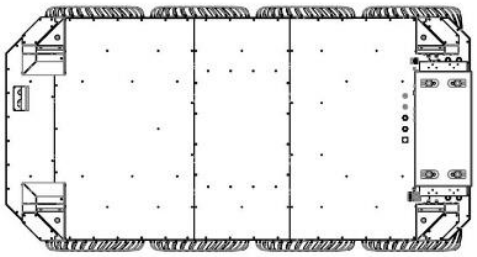
TECHNICAL SPECIFICATIONS



FRONT



SIDE



TOP

SIZE AND WEIGHT	
EXTERNAL DIMENSIONS (L x W x H)	2.96 x 1.5 x 1.14 m (9.7 x 4.9 x 3.74 ft)
BASE WEIGHT (includes base battery pack)	1077 kg (2374 lbs)
GROSS VEHICLE WEIGHT	1590 kg (3505 lbs)
GROUND CLEARANCE	24 cm (9.5 in)
SPEED AND PERFORMANCE	
MAX. PAYLOAD	513 kg (1131 lbs)
MAX. INCLINE	Power to traverse 20° inclines at gross vehicle weight Stable on 30° inclines and 35° side slopes
MAX. SPEED	30 km/h (18.6 mph)
SUSPENSION	Fixed with low pressure tires
TRACTION	8x8 25" all terrain tires or 18" track system
BATTERY AND POWER SYSTEM	
BATTERY CHEMISTRY	LiFePO4
CAPACITY	400 Ah at 53 V
CHARGE TIME	24 hrs on single charger, 12 hrs on dual chargers
NOMINAL RUN TIME	6 hrs
USER POWER	12V (3 x 10 Amps), 24V (3 x 10 Amps), VBAT at 80 Amps
INTERFACING AND COMMUNICATION	
CONTROL MODES	Remote control, Computer controlled velocity commands (v, θ), Indoor/outdoor autonomy packages
FEEDBACK	Battery voltage, motor currents, wheel odometry, control system status, temperature, safety status
COMMUNICATION	Ethernet, USB, Remote Control, Wi-Fi
DRIVERS AND APIs	Packaged with ROS Kinetic (includes RViz, Gazebo support), Matlab API available
INCLUDED HARDWARE	IMU, encoders, Onboard computer, E-Stop (hardware loop), E-Stop (software loop), removable 16x M8 mounting points, bilge pumps (optional), brakes, generator (optional)
ENVIRONMENTAL	
OPERATING AMBIENT TEMPERATURE	-10 to 50 °C (-14 to 122 °F)
STORAGE TEMPERATURE	-40 to 50 °C (-40 to 122 °F)
IP RATING	IP67 below top deck, IP65 above top deck (excluding optional generator) - Vehicle is designed to float and should not be fully submerged.
AMPHIBIOUS	Fully amphibious, 4 km/h (2.4 mph) maximum water speed*

CONTACT US FOR MORE INFORMATION

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