Mack

Magnetic Crawler Platform

This robust and versatile mobile robot can traverse confined spaces, walls, panels, and magnetic surfaces. Use Mack to bring sensors, cameras, and tools to difficult to access areas.

Magnetic bay accessories enable the robot to drive and perform inspections vertically or even upside-down on surfaces such as steel walls, tanks, and pipes.

The Mack chassis comes standard as a tethered system with forward and rear racing cameras and floodlights. An operator control platform allows the pilot to control the system through confined and obscured areas.

The chassis and actuators on Mack have been tested and operated in shallow water, allowing the robot to be used in pipes and reservoirs without requiring them to be fully drained.

The versatility of the Mack platform allows it to be customized to fit customer-specific needs. Standardized mounting points allow for the mounting of HEBI manipulator arms and a variety of sensors and tools. Inquire with HEBI to have a custom sensing/tooling solution made for your specific needs.

MACK (TRACK ACTUATOR) — TECHNICAL SPECIFICATIONS

Dimensions	400mm L x 300mm W x 203mm H [16" L x 12" W x 8" H]
Robot Mass	18 kg [40 lbs]
Tether Mass	0.15 kg/m [0.10 lb/ft]
Linear Speed	12 m/min [39.4 ft/min]
Payload **Horizontal Surface:** **Vertical Surface:**	 43 kg [95 lbs] 22 kg [50 lbs]
Power	24-48V DC Cont. Current: 1A @ 36V Peak Current: 3A @ 36V
Environment	-10ºC to 50ºC Ambient Designed for IP54
Connections	2x Tether: 100 Mbps Ethernet, 24-48V DC Power, M-stop
Video	2x 1080p Video Output over RTSP Stream 120º Field of View on Front and Back of Chassis
Actuation (Track Drive)	2x Track Actuators
Sensing	Angular Position Angular Velocity Motor Torque (Current-Based) 3-axis Accelerometer / Gyro Motor and Electronics Temperature Bus Voltage Bus and Winding Current
Control	Joystick Control with Video Feeds on HEBI Mobile I/O App
API Support	MATLAB (Windows / Linux / OS X) ROS (Linux) Python (Windows / Linux / OS X) C/C++ (Windows / Linux / OS X)

Additional technical documentation at **docs.hebi.us**

Updated on July 25, 2024. Specifications subject to change without notice.

Robot Control Case

All-in-one Control Platform

The Robot Control Case (RCC) is a rugged, portable control station compatible with tethered HEBI kits. 4 internal batteries provide extra on-site operation time to tethered robots, and a built-in M-stop provides an extra layer of security while in the field. Two 7 inch external monitors provide extra screen space for camera or data monitoring, and an internal router keeps communications secure and contained.

Robot Control Case — TECHNICAL SPECIFICATIONS

Dimensions (closed)	411mm x 323mm x 168mm [16.20" x 12.70" x 6.60"]
Mass	8.5 kg [19 lbs]
Purchase Includes	External Laptop (model based on availability) or Integrated Computer IPad pre-loaded with HEBI Scope and HEBI Mobile I/O Various cables for power/data transmission
Features	2x 7in Monitors (1280 x 800), Robot Tether Port, M-stop Button, Ruggedized Charger, Independent System and Robot Power Buttons, USB-C Connectors for Laptop and IPad, Additional Ethernet LAN port for external device
Power/Data	4x onboard HEBI Wattman Batteries 374.4Wh total (4x 36V, 2.6Ah) Batteries charge robot during use through Tether. Internal 100 mb/s LAN network

Additional technical documentation at **docs.hebi.us**

Updated on July 15, 2024. Specifications subject to change without notice.