

Tready Jr / Maggie

Confined Space Crawler Platform

This robust and versatile mobile robot can traverse confined spaces, uneven terrain, and magnetic surfaces to deliver sensors and cameras to wherever you need them.

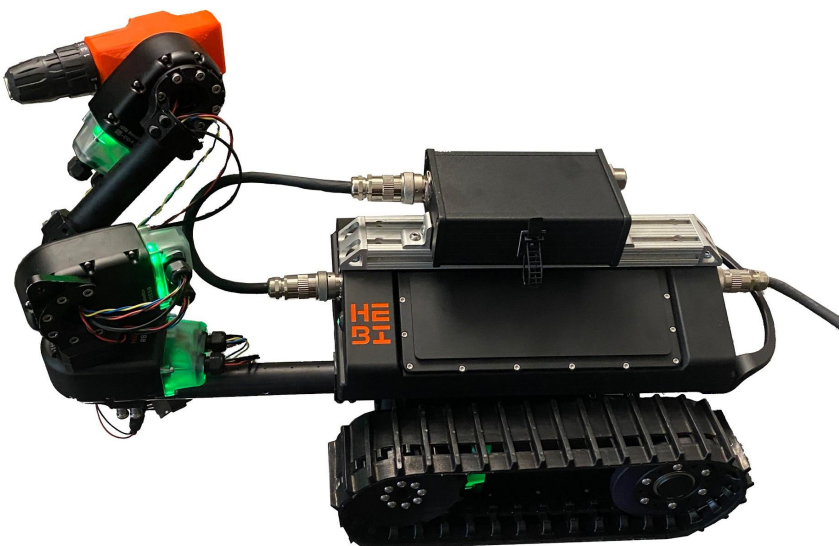
Optional magnetic bay accessories enable the robot to drive and perform inspections vertically or even upside-down on magnetic surfaces such as steel walls, tanks, and pipes.

The Tready Jr. chassis comes standard with two cameras and floodlights; one set facing forward and the other facing behind. These allow the operator to pilot Maggie through confined and obscured areas.



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

The versatility of the Tready Jr / Maggie 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.



Tready Jr. / Maggie – TECHNICAL SPECIFICATIONS

CONFIGURATION	Tready Jr.	Maggie (Magnetic)
Dimensions*	400mm L x 300mm W x 225mm H [16" L x 12" W x 9" H]	
Robot Mass*	15 kg [33 lbs]	18 kg [40 lbs]
Tether Mass	0.15 kg/m [0.10 lb/ft]	
Linear Speed	0.2 m/sec [0.66 ft/sec]	0.1 m/sec [0.33 ft/sec]
Payload* Horizontal Surface: Vertical Surface:	40 kg [90 lbs] —	40 kg [90lbs] 20 kg [45 lbs]
Power	2x onboard HEBI Wattman Batteries 187.2Wh total (2x 36V, 2.6Ah) Batteries charge during use through Tether.	
Environment	-10°C to 50°C Ambient IP67, shallow water submersion	
Connections	2x Tether: 100 Mbps Ethernet, 24-48V DC Power, M-stop	
Video	2x 1080p Video Output over RTSP Stream 120° Field of View on Front and Back of Chassis	
Actuation (Track Drive)	2x R8-16 Actuators	2x R8-16+ Actuators
Sensing	Angular Velocity 3-axis Accelerometer / Gyro Temperature Voltage 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) C# (Windows)	
Additional technical documentation at docs.hebi.us Updated on April 2, 2024. Specifications subject to change without notice.		

