

DINGO™

INDOOR ROBOTIC PLATFORM



VERSATILE & RELIABLE INDOOR MOBILE ROBOT FOR RESEARCH AND EDUCATION



FULLY CUSTOMIZABLE

Dingo is a light-weight, compact indoor mobile robot designed for robotics research and education. Dingo is available in two drive systems, differential and omnidirectional, with expandable power and computing options, making it ideal for a wide range of robotic applications including autonomous navigation, mobile manipulation, and mapping.

ROS READY

Dingo is shipped with the open-source Robot Operating System (ROS), allowing researchers to get started quickly with existing research and widely available ROS libraries. Dingo is also supported in Gazebo Physics Simulator, RViz and MoveIT! Motion planner.

EASY INTEGRATION

As with all Clearpath mobile robots, Dingo is compatible with a wide range of third-party sensors and accessories, including lidars, cameras, manipulators and more. Payloads are easily added with a flexible mounting system, accessible on-board power and reconfigurable I/O.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS



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

TECHNICAL SPECIFICATIONS



	DINGO-D Differential Drive	DINGO-O Omnidirectional Drive
SIZE AND WEIGHT		
EXTERNAL DIMENSIONS	551 x 517 x 110 mm (21.7 x 20.3 x 4.33 in)	686 x 517 x 114 mm (27 x 20.3 x 4.5 in)
WEIGHT	9.1 kg (20 lbs)	13.0 kg (28 lbs)
OBSTACLE CLEARANCE	14 mm (0.55 in)	16 mm (0.63 in)
SPEED AND PERFORMANCE		
DRIVE CONFIGURATION	Differential	Omnidirectional
MAXIMUM MODULES (see below)	2	4
MAX PAYLOAD	20 kg (44 lbs)	20 kg (44 lbs)
MAX SPEED	1.3 m/s (2.9 mph)	1.3 m/s (2.9 mph)
OPERATING ENVIRONMENT	Indoor	Indoor
BATTERY AND POWER SYSTEM		
BATTERY CHEMISTRY	Lithium Ion or Sealed Lead Acid	Lithium Ion or Sealed Lead Acid
USER POWER	20A @ VBAT (11-16.8V), ~7A @ 12V, 5A @ 5V	20A @ VBAT (11-16.8V), ~7A @ 12V, 5A @ 5V
POWER	80W Typical Use	170W Typical Use
INTERFACING AND COMMUNICATION		
CONTROL MODES	Kinematic commands, Open loop motor driver commands (voltage), Wheel velocity commands	Kinematic control, Individual wheel velocities
FEEDBACK	Battery and motor current; Wheel velocity and travel; Onboard IMU	
COMMUNICATION	Ethernet, USB 3.0, RS 232	
INCLUDED ACCESSORIES	Playstation controller (with purchase of a computing module)	
DRIVERS AND APIS	ROS Kinetic, Gazebo, MoveIt! Support	

Dingo's battery and computing configuration can be fully customized and tailored to your application using the following standard modules. Dingo-D and Dingo-O's chassis allows for up to 2 and 4 modules, respectively.



LEAD ACID BATTERY MODULE

Capacity: 18 Ah at 12v
 Operating Time

- Dingo-D: 2 hrs
- Dingo-O: 1 hrs

Charge Time: 4 hrs

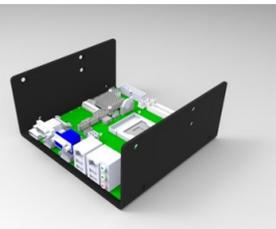


LITHIUM ION BATTERY MODULE

Capacity: 28.5 Ah at 14.4v
 Operating Time

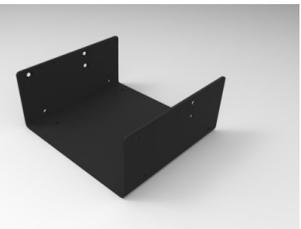
- Dingo-D: 4 hrs
- Dingo-O: 2 hrs

Charge Time: 8 hrs



COMPUTING MODULE

Mini-ITX Computer or
 NVIDIA Jetson Developer Kit



EMPTY MODULE

For custom payloads and accessories

CONTACT US FOR MORE INFORMATION

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