

an affordable & customizable

BlueRobotics

BLUE ROV2

high-performance ROV



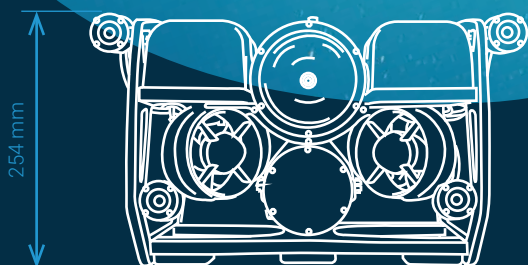
The BlueROV2

makes the once-difficult task of seeing underwater a simple one—providing reliable performance for basic underwater exploration. As your projects evolve, the BlueROV2 grows with you by offering customization and expandability to match your changing needs. This versatile, high-performance ROV comes in six- and eight-thruster configurations, is equipped with open-source software, and has a variety of accessories to enhance its functionality. With thousands of units in use, the BlueROV2 is one of the most popular underwater drones, capable of adapting to both simple and advanced missions.

Need a little help with assembly, training services, or special mods? We have a team of worldwide distributors that can assist with all things BlueROV2!

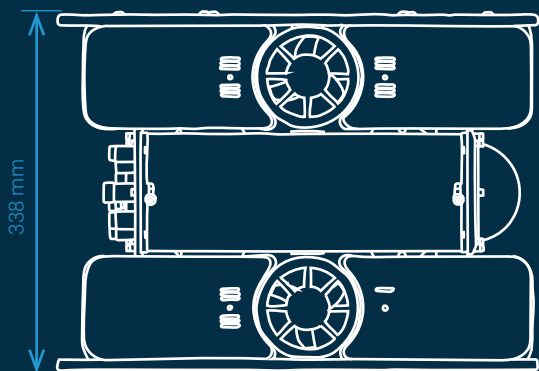
The BlueROV2 comes partially assembled and requires 6–8 hours of assembly. This hands-on process gives you a deeper understanding of the system, making it easy to upgrade or modify your ROV as your needs change.

The BlueROV2 is an ideal tool for underwater tasks ranging from search and rescue to aquaculture inspection, photogrammetry, and more! The possibilities are endless. How will the BlueROV2 enable you?



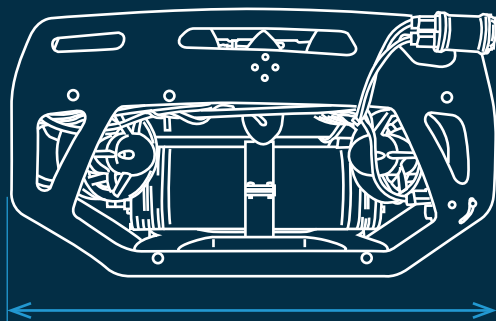
254 mm

front



338 mm

top



457 mm

side

PHYSICAL

Dimensions

(Length x Width x Height) _____ 457 mm x 338 mm x 254 mm // 18 in x 13.3 in x 10 in

Weight in Air w/ ballast & battery _____ 11–12 kg // 24–27 lb

Weight in Air w/o ballast & battery _____ 9–10 kg // 20–22 lb

Cable Penetrator Holes _____ 18x M10 total, 6x available for expansion

Buoyancy Foam _____ R-3318 Urethane Foam rated to 300 m

Construction _____ HDPE frame, aluminum flange/end cap, & acrylic or aluminum tubes

Main Tube (Electronics Enclosure) _____ Blue Robotics 4 in series w/ aluminum end caps

Battery Tube _____ Blue Robotics 3 in series w/ aluminum end caps

Ballast Weight _____ 9 x 200 g stainless steel weights

Battery Connector _____ XT90

PERFORMANCE

Maximum Rated Depth (Acrylic) _____ 100 m // 330 ft

Maximum Rated Depth (Aluminum) _____ 300 m // 990 ft

Maximum Forward Speed _____ 1.5 m/s // 3 knots

Thrusters _____ Blue Robotics T200 with WLP

ESC _____ Blue Robotics Basic 30A ESC

Thruster Configuration _____ 6 thrusters (4 vectored, 2 vertical)

Forward Bollard Thrust (45°) _____ 9 kgf // 19.8 lbf

Vertical Bollard Thrust _____ 7 kgf // 15.4 lbf

Lateral Bollard Thrust (45°) _____ 9 kgf // 19.8 lbf

Payload Capacity

(configuration dependent) _____ 1.2 kg–1.4 kg // 2.6–3.1 lbs

technical details

TETHER

Dimensions - Regular (Diameter x Length)	7.6 mm x 25–300 m // 0.30 in x 80–980 ft
Dimensions - Slim (Diameter x Length)	4.0 mm x 50–200 m // 0.16 in x 164–656 ft
Working Strength	35 kgf // 77 lbf
Breaking Strength	155 kgf // 342 lbf
Strength Member	Kevlar with waterblock
Buoyancy in Freshwater	Neutral
Buoyancy in Saltwater	Slightly Positive
Conductors	4 twisted pairs, 26 AWG

LIGHTS

Brightness	2 or 4 x 1500 lumens each with dimming control
Light Beam Angle	135 degrees, with adjustable tilt

CAMERA

Resolution	1080p
Camera Field of View	110 degrees horizontally
Tilt Range	+/- 90 degree camera tilt (180 total range)
Tilt Servo	Hitec HS-5055MG

SENSORS

IMU	6-DOF IMU (on Navigator)
Compass	Dual 3-DOF magnetometers (on Navigator)
Internal Pressure	Internal barometer (on Navigator)
Pressure/Depth and Temperature Sensor (external)	Blue Robotics Bar30
Current and Voltage Sensing	Blue Robotics Power Sense Module
Leak Sensor	Integrated leak sensor (on Navigator)

BATTERY (can be swapped in about 30 seconds)

Battery Life (Normal Use)	2 hours w/ 18Ah battery
Battery Life (Light Use)	4 hours w/ 18Ah battery



BlueOS

BlueOS is a software ecosystem that runs onboard the BlueROV2. It provides all of the features you need and has the tools and flexibility for you to add the features you want.

BlueOS is open-source, community-oriented, and a blast to use!

integrations

scanning imaging sonar

Blue Robotics Ping360
Scanning Imaging Sonar
Range: 50 m
Beam Height: 25 degrees

single beam echosounder

Blue Robotics Ping Sonar
Altimeter & Echosounder
Range: 100 m
Beam Width: 25 degrees

gripper

Blue Robotics Newton Subsea Gripper
Single Function Manipulator
Grip Force: 124N



The Reef by Blue Robotics is a curated collection of products from some of the most innovative companies in the industry that will take your marine robotics efforts to the next level.

multibeam imaging sonar

Sonoptix ECHO
Multibeam Imaging Sonar
Range: 200 m @ 400 kHz // 30 m @ 700 kHz
Vertical View Angle: 40 degrees
Horizontal View Angle: 90 degrees @ 400 kHz
120 degrees @ 700 kHz

doppler velocity logger

Water Linked DVL A50 and A125
Range: 50 m (A50); 125 m (A125)
Velocity Resolution: 0.1 mm/s
Long Term Accuracy: ± 1.01%

high-voltage power supply

The Outland Technology Power Supply System outfits the BlueROV2 to be powered through the tether, allowing it to operate indefinitely and eliminating the need for batteries.

