

Underwater Mini ROV For Long Distance Pipe Inspections

Up to 5km tether length. Fits anywhere DN>300mm.

Product Features

- A miniature submersible ROV fits into any water-filled pipe /tunnel with DN >300mm.
- Super Long Communication Distance from 1km to 5km.
- Battery Powered Unit
- Perfect for Urban Water Systems / Long Pipes @power plants, desalination plants, etc.

Application Scenarios

- Search and Recovery (SAR)
- Infrastructure and asset inspection (pipes, tunnels, etc.)
- Aquaculture and Fisheries Monitoring
- Environmental and Marine Research
- Photogrammetry and 3D Mapping
- Public Safety and Emergency Response
- Education, Training, and Prototyping
- R&D Development and System Integration

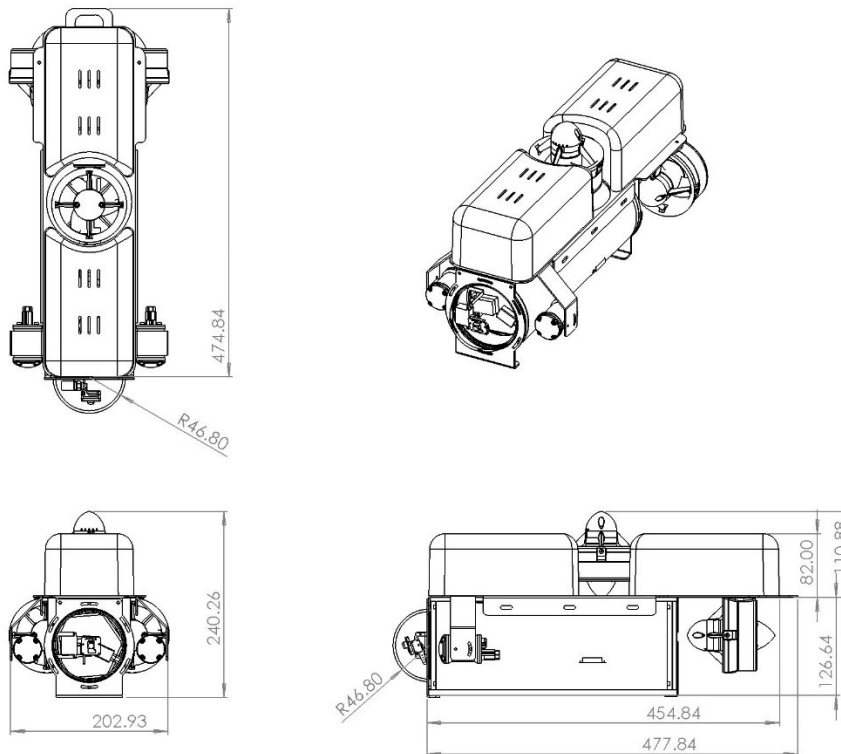


Basic Specs

Frame Parameters	Dimensions (mm)	522 * 203 * 240
	Weight (kg)	9
	Operating Depth(m)	300 (Standard) Other depths can be customized
Propulsion System	Thrusters	2 Horizontal + 1 Vertical
	Max Speed	4 knots
	Payload Capacity	5kg
	Control System	Main Processor: STM32F427,32-bit ARM Cortex-M4, NuttX RTOS. 3-Axis Gyroscope x2(MPU6000+L3GD20H) 3-Axis Accelerometer x2(MPU6000+LSM303D)
	Control Modes	Depth Hold Manual
Camera & Lighting	Underwater Lights	Standard:2×1500 LM high-brightness LED lights, dimmable
	Camera	Gimbal Tilt:±50°, Sensor: Sony IMX219 Pixel:8MP, CCD Size: 1/4" Aperture(F):2.0, Focal Length:3.04 mm Field of View: 76°, Focus: Manual

		Video Stream:1080p30/720p60/640 * 480p90
Comm. & Power Supply	Endurance	Battery:2.5-8 hours
	Cable	Default: 100m (Reel purchased separately) Customizable up to 2 km
Remote Control	Surface Unit	Standard
	Computer	User-provided (Windows 10+ or Ubuntu 22.04+)
	Software	Standard (Compatible with MAVLink protocol)
Optional Configurations		Manipulator/GoPro/Auxiliary Camera/ Imaging Sonar /Altimeter/ Pipe Sonar/ Underwater Positioning/ Water Quality Sensor/etc.
Customization		Communication Interfaces: USB/RS-485/ RS-232/ UART/ Ethernet, etc. Power:5VDC/12VDC/24VDC/220VAC ,etc.

Main Dimensions



- Product specifications are subject to change without further notice. Please refer to our official website for latest information.