



TRIDENT[®]

Technical Specifications

SIZE AND WEIGHT

EXTERNAL DIMENSIONS [L X W X H]	410mm x 205mm x 86mm (16.1in x 8.1in x 3.4in)
WEIGHT	3.4kg (7.5lbs) ballasted for freshwater 3.5kg (7.7lbs) ballasted for seawater

PERFORMANCE

DEPTH RATING	100m (328ft)
THRUSTERS	3 ultra-rugged, low-maintenance brushless motors
MAXIMUM SPEED	2 m/s (3.89kts / 7.2kph / 4.5mph)

BATTERY AND POWER

BATTERY ARCHITECTURE	3S4P Li-NMC 18650 cells with built-in PCM, UN38.3 approved
CAPACITY	95 WH
CHARGE TIME	1.5hr from 20% to 80%, 3hr from 0% to 100%
NOMINAL RUN TIME	3-4 hours, normal operation (active piloting, lights on)
POWER CONSUMPTION	30W nominal
CHARGER POWER REQUIREMENT	120VAC to 240VAC (charger included)

INTERFACE AND COMMUNICATION

TOPSIDE WiFi INTERFACE	802.11 b/g/n
SYSTEM REQUIREMENTS	Works on modern Android (minimum 5.1) device through the OpenRov App.
VEHICLE PAYLOAD DATA INTERFACE	WiFi

OPERATING CONDITIONS

OPERATING WATER TEMPERATURE RATING	-2°C to 40°C (28.4°F to 104°F)
STORAGE TEMPERATURE	0°C to 25°C (32°F to 77°F)
CHEMICAL RESISTANCE	Seawater, diluted Chlorine

CAMERA SPECIFICATION

RESOLUTION	1080p @ 30fps recorded, 720p @ 30fps live on device
VIDEO LATENCY	Very low latency (~120 ms)
VIDEO COMPRESSION	h.264
VIDEO EXPORT FORMAT	mp4
FEATURES	Excellent color rendition, high dynamic range, optimized for low-light underwater, wide angle field-of-view and scratch-proof sapphire window.

LIGHTS

QUANTITY	6 forward facing LEDs (3 on each side)
TOTAL LUMENS	360
COLOR TEMPERATURE	4000K

TETHER SPECIFICATION

AVAILABLE LENGTHS	25m and 100m (82ft and 328ft)
MAXIMUM OPERATIONAL LENGTH	150m (492ft)
BREAKING STRENGTH	100kg, Kevlar-reinforced
BUOYANCY	Neutrally buoyant in freshwater, slightly positive in seawater
FEATURES	High visibility yellow with wear-resistant polyurethane jacket

SENSORS

IMU	3-axis magnetometer, 3-axis gyro, 3-axis accelerometer
DEPTH / TEMPERATURE	1cm-resolution depth sensor with temperature calibration and display
OTHER	Internal barometer, battery meter

