

TECHNICAL SPECIFICATIONS

BLUEYE X7



**Please note that all specifications may be subject to change in line with our policy of continual improvement.*

Drone specifications

Drone

Ingress protection	IPX8
Dimensions	66 x 45 x 25 cm (LxWxH)
Weight in air	Approx. 20 kg
Construction	Aluminium pressure enclosures, Polycarbonate (PC) windows
Buoyancy material	HCP 70 Polymer Foam
Maximum rated depth	500 m
Forward speed at normal use	3 kn/s
Thrusters	7 x 350 W
Run time at normal use	Approx. 5 hrs
Operating temperature	-5 to +35 °C



Guest Port 1

Usage	Easy accessible for end-users
Power	5V, 16V (BAT), 24V
Protocols	ETHERNET 10/100Base-T/TX, RS232 (or RS485/RS422), USB, I2C, PWM, UART

Guest Port 2

Usage	Easy accessible for end-users
Power	5V, 16V (BAT), 24V
Protocols	ETHERNET 10/100/100Base-T/TX, RS232, I2C, USB 2.0, PWM

Guest Port 3

Usage	Easy accessible for end-users
Power	5V, 16V (BAT), 24V
Protocols	ETHERNET 10/100/1000Base-T/TX, RS232, USB 2.0, I2C, PWM

Guest Port 4

Usage	Accessible for end-users to mount secondary camera
Power	5V
Protocols	USB 3.0

Internal Port 1

Usage	Intended for use by gripper
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Internal Port 2

Usage	Intended for use by multibeam sonar
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Internal Port 3

Usage	Intended for use by DVL and GPS
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Camera

Mechanical tilt	-90 to +90 °
Vertical field of view	235 °
Sensor	Onsemi AR0822 CMOS, 1/1.8-inch
Max image size	3840 x 2160 pixels
Shutter speed	1/30 s – 1/8000 s
Picture max resolution	8M (3840 x 2160 pixels)
Picture type	JPEG
Video resolution	UHD: 3840 x 2160 25/30 Fps, FHD: 1920 x 1080 25/30/60 Fps, HD: 1280 x 720 25/30/60 Fps
Video type	MP4
Video storage bit-rate	50 MBit/s
SD card	512 GB
HDR	Yes

LED lights

Luminous flux	3300 Lumen
Colour temperature	5000 K
Colour rendering index (CRI)	90
Adjustable dimming	Yes

Sensors

IMU	3 axis gyro & accelerometer & magnetometer
Bias Drift	2 °/hour
Factory Temperature Calibrated	Yes
Depth sensor	Resolution: 0.2 m bar
Depth sensor operating range	0 to 60 bar
Temperature sensor	+/-4 °C

Tether

Length	Up to 700 m
Breaking strength	100 kg
Number of cables	1 twisted pair (copper)
Size	28 AWG

Controller

Compatibility	iOS, Apple Vision Pro, Adroid, Android AR, Rugged Android Controller
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Surface Unit specifications

Surface Unit

Ingress protection	IP64
Dimensions	38 x 149 x 158 mm (LxWxH)
Operating frequency	2.4 GHz / 5.8 GHz
Max Wi-Fi distance	30 m
Battery	19.48 Wh
Runtime/Charging time	6h
Operating temperature	0 to +35 °C
Charging temperature	+10 to +35 °C
Transmitter power	125 mW
Operating voltage	5 - 8.4 V
USB-C	In: 5 V, 2.1 A - Out: 5 V, 400 mA
Internal Antennas	Dual-band 3.8dBi

Smart Batteries

Standard Battery (2x batteries)

Nominal Voltage	14.8 V
Nominal Capacity	13000 mAh
Nominal Energy	192.4 Wh
Operating temperature	-5 to +35 °C
Charging temperature	5 to 30°C
Normal runtime	Approx. 3 hours

High Capacity Battery (2x batteries)

Nominal Voltage	14.4 V
Nominal Capacity	29500 mAh
Nominal Energy	424.8 Wh
Operating temperature	-10 to +50 °C
Charging temperature	5 to 30°C
Normal runtime	Approx. 6 hours