

BALI USV100

Autonomous bathymetry



Unparalleled performance on water

Hydrojet propulsion ideal for low depth sounding

Full day operation (2 knots)

100% automated bathymetry



GEOD® powered

Centimeter RTK or SBAS multiconstellation GNSS

Connected (UHF, GSM, Wifi)

Single Frequency (SF) and Dual Frequency (DF)

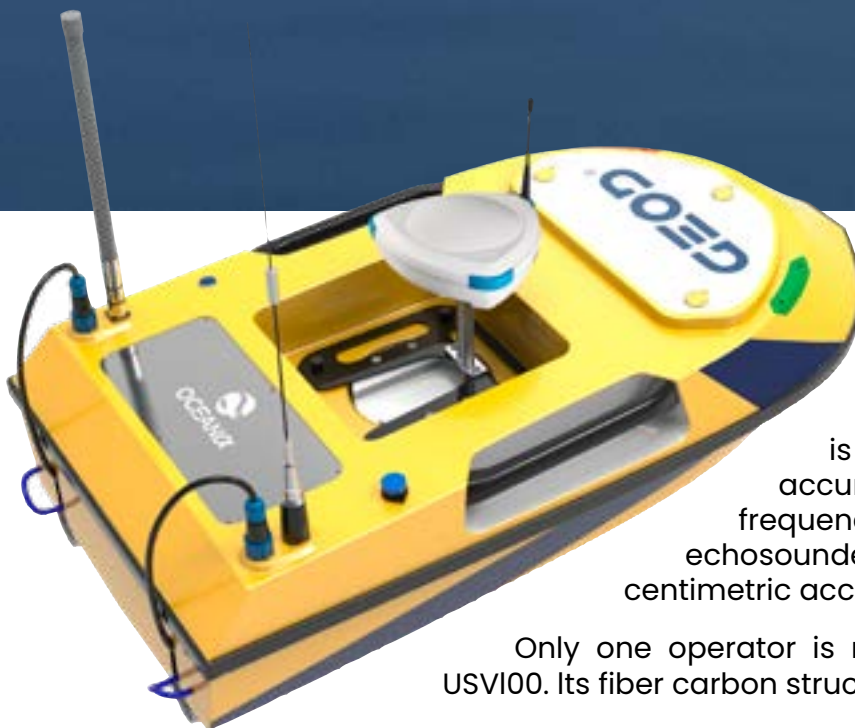


Robust and lightweight

One surveyor can operate it

Ultra-resistant carbon fiber hull

Ideal for inland waters surveys and mining industry



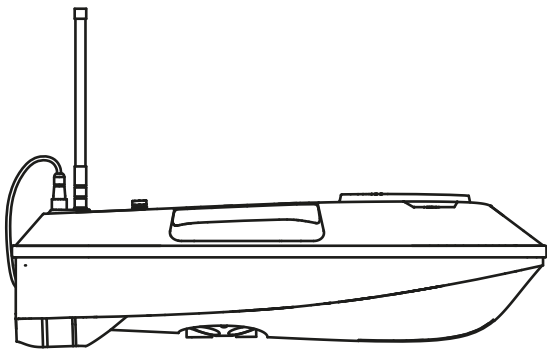
BALI USV100 is a complete bathymetric survey solution, which is simple to operate and extremely accurate. It comes with either a single frequency (SF) or a dual frequency (DF) echosounder for sounding up to 200m with a centimetric accuracy.

Only one operator is needed to deploy and operate BALI USV100. Its fiber carbon structure make it easy to carry.

Technical characteristics

Positioning	GPS, Glonass, Galileo and BeiDou dual-frequency RTK (1cm) - SBAS (0.5m)
Sounding*	
<ul style="list-style-type: none"> 450kHz frequency 	Range : 0,15m - 100m Accuracy : 0.2% of depth range or 2cm Angle beam : 5°
<ul style="list-style-type: none"> 200kHz frequency 	Range : 0,4m - 200m Accuracy : 0.2% of depth range or 2cm Angle beam : 9°
<ul style="list-style-type: none"> 30kHz frequency 	Range : 0,4m - 200m Accuracy : 0.2% of depth range or 2cm Angle beam : 26°
Communication	GSM Long-range UHF (403-473MHz) Wireless LAN (2.4GHz)
I/O interface	Ethernet Wifi
User interface	Full system configuration Mission planning Real time monitoring Real time navigation Bathymetric data cleaning
Data format	
<ul style="list-style-type: none"> Position Sounding 	Latitude, Longitude, Altitude (WGS84) Water depth (meter)
Data output	NMEA0183
Software interface	Web browser (iOS, Android, Windows)

*Different configurations available on request



USV characteristics

Hull material	Carbon fiber
Size	105 x 55 x 38cm
Weight	17kg
Draft	18cm
Engine	Hydrojet
Speed	5m/s max.
Endurance (1.5m/s speed)	6h minimum
Remote controller range	1km
Wireless base station range	2km

Standard delivery

- 1 USV
- 1 rechargeable battery
- 1 wireless base station
- 1 remote controller
- 1 BALI (smart antenna + echosounder)
- 1 transit case
- 1 camera

Optional delivery

- Additional battery
- BALI stand-alone mounting kit



Easy to carry



Compact