

The **SONIC™-V PLUS** is everything you need for surface vessel applications. Factory fitted, including embedded INS, VOX-IM, SV Probe, GNSS Antennas, Cables and Mounting Bracket.



## Unique user benefits for surface vessels:

- ▶ Embedded Inertial Measurement Unit (IMU)
  - Eliminates need for multiple patch tests
  - Single cable, less space and risk of exposure
  - Improved performance with roll pitch accuracy to 0.015°
  - Highly immune to GNSS outages
- ▶ Compact VOX-IM
  - Serial connectors for Sound Velocity Probe
  - Corrections input to RTC / RTCM
  - Wide range of voltage input - AC and DC
- ▶ VOX Control User Interface
  - Fresh look, modern interface that is agile, intuitive and user-friendly
  - Improved logic and layout of advanced settings
  - Configurable hotkeys, language translations and help feature
- ▶ Ultra High Density (UHD)
  - Up to 1024 true soundings per ping for improved data density across the swath
- ▶ Technical Modes that can be upgraded remotely, anytime
  - Ultra High Resolution (UHR) 700kHz for 2020-V PLUS, 2022-V PLUS & 2024-V PLUS
  - 90/100kHz extended sounding depth for 2026-V PLUS
  - TruePix® / Multispectral backscatter with compressed water column
  - Switchable forward looking sonar (FLS)
- ▶ 50m Depth Rating
- ▶ Standard 3-year warranty, with option to extend to 6-years
  - Minimize your risk on investment
  - Fast, quality repairs performed by the team that engineered the sonar and IMU
  - Theoretical and hands-on personalized training delivered by our experts



Sonic 2020-V PLUS



Compact VOX-IM



VOX Control User Interface



2022-V PLUS

### Easy to Integrate on any platform



ASV/USV



Surface Vessel

### Extra Light & Compact!



# SONIC V+

## SERIES

2020 / 2022 / 2024 / 2026



	Sonic™ 2020-V PLUS	Sonic™ 2022-V PLUS	Sonic™ 2024-V PLUS	Sonic™ 2026-V PLUS
Selectable Frequencies	200kHz - 450kHz. Optional 700kHz	170 - 450kHz. Optional 700kHz		170 - 450kHz. Optional 90kHz and 100kHz
Minimum frequency increase	1Hz			
Beamwidth, across track and along track	1° x 1° at 700kHz (optional) 1.8° x 1.8° at 450kHz 4° x 4° at 200kHz	0.6° x 0.6° at 700kHz (optional) 0.9° x 0.9° at 450kHz 2° x 2° at 200kHz	0.3° x 0.6° at 700kHz (optional) 0.45° x 0.9° at 450kHz 1° x 2° at 200kHz	0.45° x 0.45° at 450kHz 1° x 1° at 200kHz 2° x 2° at 90kHz & 100kHz (optional)
Number of soundings	Up to 1024 soundings per ping			
Max speed (vessel)	11 knots (*)			
Near-field focusing	Yes			
Roll stabilized beams	Yes			
Pitch stabilized beams	Yes	No		Yes
ROBO Automated Operation	Yes Auto Power, pulse width, RangeTrac, GateTrac, SlopeTrac			
Saturation monitor	Yes			
Selectable Swath Sector (also referred as Max Coverage)	10° to 130°, up to 160° through engineering command User selectable in real-time	10° to 160° User selectable in real-time		
Sounding Patterns	Equiangular Equidistant single / double / quad modes Ultra High Density (UHD)			
Sounding Depth**	up to 200m	up to 500m		up to 800m+
Pulse Length	15µs - 1.115ms			15µs - 2ms 140µs - 2ms in LF mode
Ping rate	up to 60kHz			
Immersion Depth	50m			
Bottom Detect Resolution	3mm			

### Sonic-V Plus Series INS Accuracy (with RTK)

Roll & Pitch	0.015°
Heading	0.015° with 4m antenna baseline, 0.03° with a 2m antenna baseline
Heave	5cm or 5% real-time, 2cm or 2% delayed heave
Position	Horizontal: 1cm + 0.5 ppm, Vertical: 1.5cm + 1 ppm

### Electrical Interface

Mains	90-260V AC, 45-65Hz, or 10-55V DC			
Power consumption	20W avg	35W avg	50W avg	100W avg
Uplink/downlink	10/100/1000Base-T Ethernet			
Sync in, Sync out	TTL			
Deck cable length	15m, optional 25m and 50m			

### Mechanical Specifications

Sonar Dimension (LWD)	140 x 161 x 133.5 mm			
Sonar Mass	4.4kg			
Receiver Dim (LWD)	276 x 109 x 190 mm		480 x 109 x 190 mm	
Receiver Mass	7.7kg		12.9kg	
Projector Dim (LWD)	273 x 108 x 86 mm			480 x 109 x 196 mm
Projector Mass	3.3kg			13.4kg
VOX-IM Interface Module (LWH) & Mass	212 x 160 x 70.5 mm; 2.9kg			

(\*) The speed of the survey is primarily limited by the installation of the MBES.

(\*\*) Depending on environmental conditions.

Specification Sheet 2024 version 2C subject to change without notice