

SEE HOW R2SONIC STACKS UP AGAINST OTHER SONAR PRODUCTS:

SPECIFICATION	SONIC 2022, 2024, 2026	COMPETITORS	THE R2SONIC ADVANTAGE
System Architecture	Embedded Processor	Separate topside processor, and in some cases the user is still required to use a separate PC or laptop.	Elimination of bulky topside processor dramatically reducing system size, weight, portability and power consumption – creating a more stable solution.
Operating Frequencies	Wideband: Any Frequency Selection 170 to 450 kHz to 1 Hz resolution (ie. 0.001kHz), in real-time Optional 700kHz	190 kHz 420 kHz NOT selectable to 1 Hz resolution (ie. 0.001kHz) NO 700 kHz option	More system flexibility, select frequency in real-time to optimize to survey requirements or environment.
Beam Width	0.6° x 0.6° @ 700kHz [CWB4] 1° x 1° @ 400kHz	1° x 1° @ 400kHz	Smaller bottom footprint with UHR 700kHz, higher resolution
Ping Rate	60 Hz	50 Hz	Higher ping rate
Sample Rate Signal Bandwidth Range Resolution	60,000 60kHz 1.25cm	30,000 (approx.) 30kHz (approx.) 2.5cm (approx.)	Higher bandwidth with better ability to resolve a range for increased imagery definition over small scale features and targets.
System Weight	Sonar Head: 10 kg , SIM: 2.4 kg	Sonar Head: 10 kg, Processor 14 kg	Nearly 2x less weight. Greater ease in installation and less cost to transport.
Snippets & TruePix™ Backscatter Output	Yes	No.	TruePix™ provides advantages of Snippets and Side Scan without the disadvantages, with up to 10,000 bottom samples, independent of bottom detection (but co-located with the bathymetry), including nadir water column, in a compact data record, with noise and multipath suppression. TruePix™ is a more advanced backscatter method and more useful in data editing, aide in determining whether data points are outliers or real.
Number of Soundings Modes of Operation*	256/512/1024 (Single, Dual, Quad Modes)	256/512	Increased soundings with better spatial distribution for small bin sizes.
Integrated Inertial Navigation System (INS)	Yes. IMU is decoupled from Sonar for ease of servicing.	No.	Seamlessly integrate high accuracy INS at substantially reduced cost with greater warranty coverage. IMU is separate from transducer for ease of servicing.
Warranty	3-years standard 6-years with low cost service plan	Unknown	Greater warranty coverage.