

SAL R1A

SIMRAD[®]

SINCE 1946

Speed Log

The SAL R1a is an IMO type-approved speed log for measuring longitudinal speed through water (STW), based on proven Acoustic Correlation technology.

The speed log is designed to meet requirements as specified by authorities and ship owners, with performance exceeding applicable IMO specifications. Its closed-ended installation is simple and cost-effective, with no need for a watertight compartment or piping above the waterline.

Acoustic Correlation

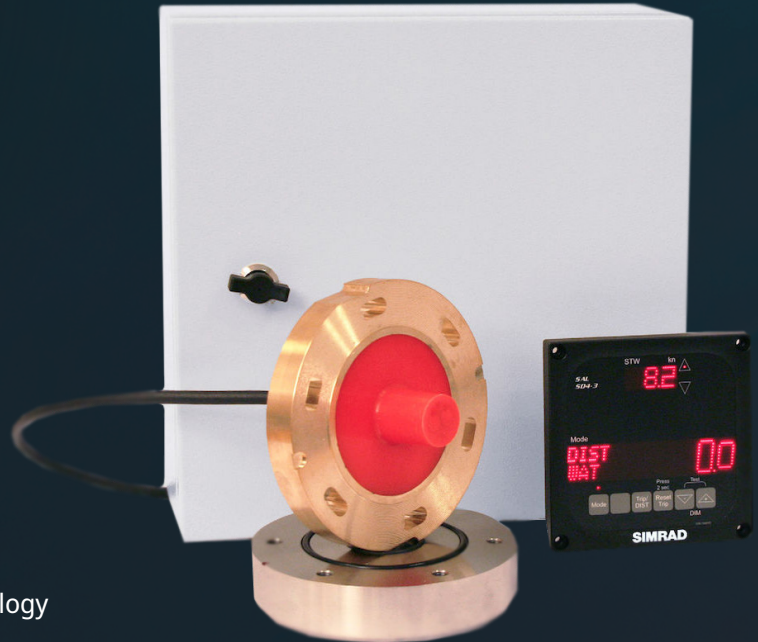
Acoustic Correlation is a proven and practical technology that measures sonar readings across two elements in a single transducer. This technology measures water speed slightly further away from the hull than electromagnetic technology and doesn't require the angular corrections of Doppler technology. This translates into less corrections required in the speed calculation algorithm, delivering stable and reliable speed through water measurements.

Easy Tank for Easy Installation

The SAL R1a's "Easy Tank" bottom arrangement provides a closed ended installation, with no need for a watertight compartment or piping above the waterline. The watertight arrangement is damage-resistant, and a watertight cable enables installation in wet environments. Bottom arrangements are available to suit both aluminium and steel hull constructions.

Key Features

- High performance due to proven Acoustic Correlation technology
- Flexible calibration allows highly accurate readings throughout the speed range
- Easy set-up and calibration from the bridge display
- Easy to install with only a few mechanical parts, lightweight bottom arrangements, and transducer mounting from inside the hull
- Space saving with compact bottom arrangements
- Safe due to a rugged mechanical design and watertight cable
- Closed ended installation means no need for a watertight compartment or piping above the waterline
- Pressure tested and approved according to PN16 (24 bar, 240 m)
- Complies with IMO resolution A.824(19)



Connectivity

The speed log's electronics are enclosed in a splash-proof steel box, which can be mounted up to ten metres from the transducer. The remote bridge display connects to the electronics unit via an industry-standard IEC 61162-1/ NMEA 0183[®] interface; the electronics unit also provides pulse and voltage outputs for connection to alternative display devices.

Specifications

SYSTEM PERFORMANCE DATA

Working principle:	Acoustic Correlation
Measuring distance:	130 mm from surface of transducer
Frequencies:	3.8 and 4.2 MHz
Speed Range:	±50 knots sensed speed
Speed accuracy:	<1% or 0.1 knot, whichever is greater Distance accuracy: <1%
Minimum water depth:	3 metres below the transducer

ELECTRONICS UNIT

Serial speed output:	One, IEC 61162-1 3rd edition (NMEA 0183®) (max load 100 ohm) (equal to 10 SD indicators)
Analogue speed output:	One, 0.1VDC/knot (max load 5 mA)
Pulse speed output:	Two closing contact relays, potential free 200 p/NM (max load 30V/30mA or 15V/100mA)
Status output:	One power fail switching contact relay
Power supply for SD-indicators:	Max 3 SD-indicators
Power requirement: consumption:	30 watts nominal 230/115VAC 50-60 Hz Power
Environmental requirements:	IEC 60945, 4th edition 2002-8
Dimensions:	360 (+30) X 360 X 170 mm
Weight:	10.5kg
Colour:	RAL7035
IP class:	IP44

MAIN INDICATOR

SD4-3:	Digital speed display Total and trip distance counter
Dimensions:	144 X 144 X 16 mm
Weight:	0.6 kg

EASY TANK

Transducer Dimensions:	0 168 mm Height 85 mm
Transducer Weight including 10 m cable:	5,5 kg
Bottom Flange weight steel:	6,2 kg
Bottom Flange weight aluminium:	2,1 kg
Total Dimensions including transducer:	0 168 mm Height 85 mm
AD80 & SD80 External I/O	1x NMEA 2000® Micro-C 1x Alarm Panel Interface 1x Ready Signal 1x External Mode Selector (Pulse) 1x External Mode Selector (Latch) 1x Engage Signal 10mA-3A (SD80 Only)

Global Service & Support

Includes:

- 2 Year Warranty
- Extended Warranty Options
- Service & Support Hotlines
- 2 Year Onboard Support*

* Applies to certified vessels only



SUPPORT	Navico Americas	+1 918 438 8669 / 855-241-3598 (Toll free)
	Navico Asia Pacific	+64 9 925 4595
	Navico EMEA	+31 786 530 004

SALES	Navico Americas	+1 832 377 9578	sales.americas@navico.com
	Navico Asia Pacific	+64 9 925 4500	sales.apacnz@navico.com
	Navico EMEA	+44 1794 510 010	sales.emea@navico.com