

DIMENSION	SIMARINE STR ★ (radar)	ULTRASONIC EXTERNAL	CAPACITIVE / TUBE PROBES	CLASSIC FLOATS (resistive arm)
CONTACT WITH LIQUID	No	No	Yes (rod inside)	Yes (mechanical arm inside)
MOVING PARTS	None	None	None	Yes — arm, pivot, float
DRIFT OVER TIME	None	Fine in clean air	Dielectric drifts with fluid changes	Float sticks, gummy fuel, corroded pivot
FOAM / DIRTY LIQUID	Usually unaffected	Foam scatters	Fouled probe = wrong reading	Float fouls; reads "stuck"
INSTALLATION	Peel-and-stick, no penetration	Top-mount but needs clear air gap	Drill, seal, drop probe	Cut hole in top, screw flange, seal
RISK OF LEAKS	None	None	Real	Real — gasket below liquid line
TANK MATERIAL	Composite / GRP direct; metal via the S5 metal tank adapter	Any	Any	Any (you're cutting it)
WORKS FOR ANY LIQUID	Yes — one part for all	Yes	Different probe per liquid	Often fluid-specific
CALIBRATION	Auto tank height detection + up to 100 points in app	2-point	2-point usually	Mechanical / 2-point
RESOLUTION	≈ 7 mm regardless of tank height	~1%	~2%	~5–10% of full scale
OUTPUTS	STR1: all 3 analogue + BLE · STR2: NMEA 2000 + BLE	Voltage / NMEA	4–20 mA, voltage	Resistive (0–190 Ω / 240–33 Ω)
LIFETIME	No wear	10+ yrs	5–10 yrs, prone to fouling	3–5 yrs, float fails
PRICE POINT	€92 / €129	€200–400	€100–250	€15–40 cheap, €80+ marine