

Four tanks, no wires.

A priced application for a four tank boat: Quasar Glass at the helm, or a Victron Cerbo already fitted.

One battery radar sensor sits on top of each tank. Nothing is wired to it and nothing is cut into a plastic tank. Levels go by Bluetooth to a Quasar Glass panel or a Victron GX. This note gives the parts and US\$ retail price, then sets the sensor against the Simarine STR and Gobius C radar senders on their published figures.

STAR-Tank

60 GHz phased coherent radar. Battery powered, 3 to 5 years.

Fresh, grey, black water and diesel.

Reads through plastic and thick GRP; bolts to the SAE 5 hole on metal.



COMMON TO BOTH OPTIONS

Sensor layer: 4 tanks, 4 sensors

ITEM	QTY	RRP	US\$
STAR-Tank, fresh, grey or black water	3	240.00	720
STAR-Tank, diesel fuel firmware	1	240.00	240
Cables, drops and tank cut-outs	0	–	0

Sensor layer **960**

One sensor SKU covers every water tank; the fuel unit is the same hardware with fuel firmware. Depth is set on the sensor to 500, 1,000 or 2,000 mm, so no depth variants are stocked. Battery CR2477, user replaceable.

ADD ON, ANY OPTION

Temperature or air quality sensors

ITEM	QTY	RRP	US\$
RuuviTag 4in1, temperature and humidity	1	45.00	45
Cables, drops and cut-outs	0	–	0

Also pressure and motion. Battery Bluetooth, read by the panel and the Cerbo. IP67 Pro 4in1 US\$55; Ruuvi Air adds CO2, PM2.5, VOC.

OPTION 1

Nothing at the helm yet: Quasar Glass

A 4 inch Quasar Glass Bluetooth panel reads the four sensors directly. No GX device and no NMEA 2000 backbone. Set up once from the panel's Tanks page: name, depth, full and empty. Levels are also in the free Quasar Glass App.

ITEM	QTY	RRP	US\$
Sensor layer, from above			960
Quasar Glass 4 inch Bluetooth Monitoring Panel	1	295.00	295

Option 1 total, panel included **1,255**

The panel also shows any Victron Bluetooth device on board. One cable pair to the panel. 10 inch and 13.3 inch panels are US\$590 and US\$890.

FOR REFERENCE

Same 4 tanks on a Simarine screen

ITEM	QTY	APPROX	US\$
STR1 radar sender, analogue	4	108	432
ST107 tank module	2	139	278
Pico display, 3.5 inch	1	337	337
3 core cable, 10 m per tank	40 m	2.00	80
Fuse holder and fuse, per run	4	6	24
Labour, 4 runs 1.5 h, setup 2 h	8 h	70	560

Simarine, on its own screen **1,711**

The STR1 is the cheap part. To see the level at the helm it needs a tank module, a Pico and a fused run to every tank. The Pico One cannot take modules, so the expandable Pico is costed. Gobius C has no screen of its own; its sensor price is on page 2.

OPTION 2

Victron Cerbo GX already on the boat

STAR-Tank is a native Bluetooth sensor in Venus OS. Enable Bluetooth sensors in the Cerbo, switch each one on, and the four tanks appear on the GX Touch, the Victron app and VRM with level, temperature and sensor battery voltage.

ITEM	QTY	RRP	US\$
STAR-Tank sensor layer, from above			960
Nano USB Bluetooth adapter for the Cerbo	1	15.00	15

Option 2 total, Cerbo unchanged **975**

The USB adapter is recommended because the Cerbo's internal Bluetooth switches off when the processor runs hot. A Quasar Glass panel can be added later as a second view.

Three radar senders, side by side

	STAR-TANK	SIMARINE STR1 / STR2	GOBIUS C
Radar	60 GHz phased coherent radar. One shot reading every 60 s, 1 mm repeatability.	Micro radar with surface filtering. Accuracy stated at mm level.	Micro radar, 2 to 3 mm stated accuracy, wave motion reduction.
Temperature	Integrated sensor, tank temperature reported with the level.	None listed.	Built in, per product page.
Power	Battery, CR2477, 3 to 5 years. Nothing from the house bank.	Wired. STR1 12 V with gauge wiring; STR2 from the NMEA 2000 backbone.	Wired. 12 to 24 V analogue, or 12 V from the NMEA 2000 backbone.
Wiring to the tank	None.	One run per tank: three analogue outputs, or an NMEA 2000 drop.	One run per tank: analogue and alarm wires, or an NMEA 2000 drop.
Plastic and GRP	Glue on top, any wall thickness including thick fibreglass.	Adhesive on top, wall up to 10 mm.	3M tape on top, no wall limit stated.
Metal tanks	SAE 5 bolt pattern machined into the base. Bolt on.	Needs the S5 metal tank adapter.	50 mm hole plus adapter, about US\$40.
Tank depth	To 2,000 mm, set at 500, 1,000 or 2,000. Deadband 9 to 15 mm shallow, 30 mm standard.	150 to 2,000 mm, auto height. Dead zone published as 10 mm and as 40 mm.	200 to 2,000 mm.
Liquids	Fresh, grey, black with foam, diesel (fuel firmware, metal tank or reflector, to 500 mm).	Fuel, fresh and grey water listed.	Black, grey, fresh, diesel and petrol listed.
Where the level shows	Quasar Glass panel and app. Victron GX, app and VRM, native in Venus OS.	STR1: analogue gauges, Pico, phone app. STR2: MFD over NMEA 2000, phone app.	MFD over NMEA 2000, or gauges. Cerbo GX by Bluetooth on the analogue model.
Housing, approvals	Billet aluminium, IP66. FCC, CE, UKCA.	Plastic, low profile. CE; NMEA 2000 certification pending.	ABS, 65 mm high, 90 mm wide. CE, NMEA 2000.
Warranty	5 years on non metal tanks, excluding battery. 1 year on the SAE metal fit.	3 years.	Not published on the product page.
US\$ RRP, each	240	108 STR1 / 149 STR2	345 analogue / 378 NMEA 2000

0

Wires to the tank. Battery and Bluetooth only

1 mm

Repeatability from a single one shot radar reading

40 m

Bluetooth range through metal skins in a typical build

5 yr

Warranty on non metal tanks, excluding the battery

COMPETITIVE ASSESSMENT

Where it stands

Close to us, but not the same

Radar through a plastic lid. Simarine and Gobius both do it, and both avoid cutting the tank. Top mounted radar is no longer unique.

Direct to the MFD. STR2 and Gobius C NMEA 2000 put the level on a chartplotter on their own. STAR-Tank reaches the MFD through a GX or a Quasar Master.

Sensor price. Simarine STR1 at US\$108 is the lowest cost radar sender in the market. STAR-Tank competes on what it costs to see the level at the helm, not on sensor price.

Where STAR-Tank is better

No wiring. A battery sensor goes on a tank under a bunk with no run back to a backbone or a gauge. The wired senders need a loom to every tank. That is the labour.

Native in Venus OS. The Cerbo lists STAR-Tank as a Bluetooth sensor: no module, no analogue input, no CAN drop. Gobius does this on its analogue model only; Simarine arrives over NMEA 2000.

Black water with foam, metal without an adapter, 5 year warranty. The holding tank is the one owners most want read. The SAE 5 pattern is in the base.

Innovation with Quasar Glass

Add Victron Bluetooth devices. Any number on the same panel: SmartShunt, Orion XS, SmartSolar.

Add Ruuvi temperature and air quality. Any number of Ruuvi sensors, battery powered, no wiring.

Multiple displays. Step up to 10 inch or add more 4 inch panels; all read the same sensors.

AI profile per tank, push button setup. One button sets depth; the sensor keeps the dominant return for that depth, so one unit suits a 300 mm water tank and a 2 m fuel tank.

Fuel by bottom bounce. Diesel reflects little radar, so the fuel firmware reads the tank floor return and inverts it.