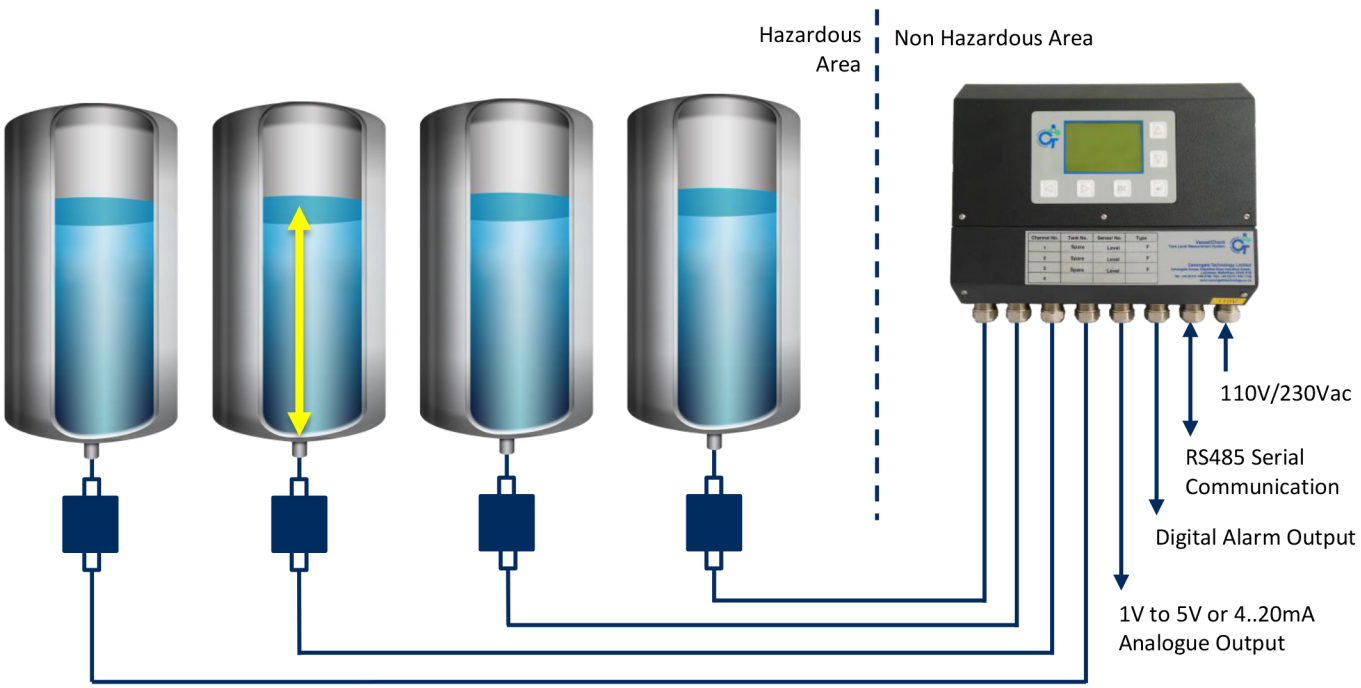
TOTAL Instrumentation Ltd
Measurable Solutions

Non-contact Level Measurement

# VesselCheck ST4




## Features:

- Truly non-invasive sensing technique
- Sensors bonded to outside of tank base and side wall
- 20 point calibration table
- Optional local display & keypad
- 4..20mA / 1..5V analogue outputs
- RS485 / 232 Modbus serial communications
- ATEX / IECEx approved sensors for hazardous areas available
- Various methods of temperature compensation

## Benefits:

- Fast, reliable and accurate tank contents measurement
- Easy installation - no tank break-in, easy retrofit to existing tanks
- No down-time during installation
- No moving parts – little or no maintenance required

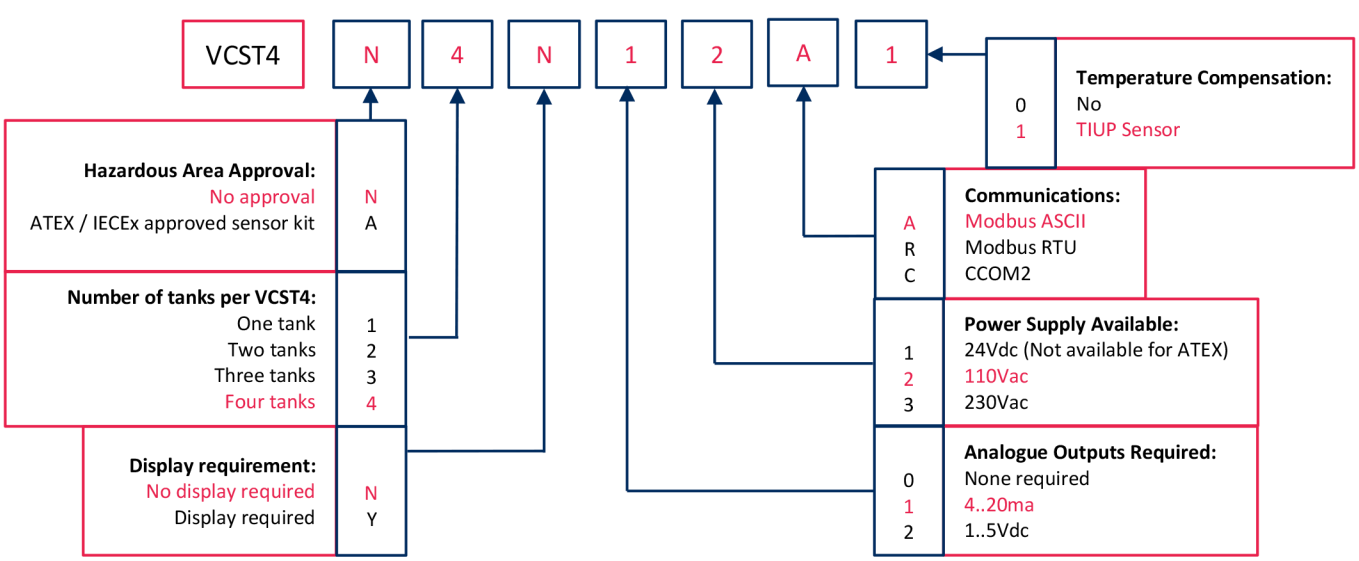


Ultrasonic Sensor

## VesselCheck ST4 – Specification

| | |
|---|---|
| Accuracy: | +/- 2mm or better |
| Repeatability: | +/- 0.5mm |
| Measuring Range: | 75mm to 25mm / 3" to 80 feet (application dependent) |
| Temperature Range (sensor): | -20°C to +125°C, - 4°F to 257°F |
| Hazardous Area Approval (sensor): | Ex mb IIC T5 Gb (-20°C ≤ Ta ≤ 60°C) Cert No. IECEx BAS 11.00.0039X |
| Analogue Outputs (optional): | 4..20mA (active) / 1..5Vdc |
| Digital Alarm Outputs (optional) | 4 x Solid state active outputs (>17Vdc) |
| Max Distance (processor to sensor) | 100m |
| Serial Outputs: | RS232, RS485, Modbus RTU / ASCII |
| Power Supply: | 24Vdc (N/A for hazardous area application) or 110/230 Vac, 50/60Hz |
| Protection Rating (processor): | IP65 |
| Protection Rating (sensor) | IP66 |
| Sensor Material: | Tufnol/Ertacetal |
| Processor Enclosure Material | High Impact Polystyrene |
| Display size (optional) | 70x43mm / 2.75x1.7" |
| Dimensions (processor / display unit) | 270x215x85mm / 10.5x8.5x3.5" |
| Weight (processor) | 1.4Kg, 3lbs |
| Temp Compensation | Optional via TIUP Sensor |

## Product Identification Code




## VesselCheck ST4 Application Overview

| Typical Application | Maximum Height | Number of Tanks | Hazardous Area Approval | Display | Variant |
|---|---|---|---|---|---|
| Less accurate: LPG spheres, wine | 20 meters | 4 | Optional | Optional | ST4 |