1. Your kit = a Sensor, Display & Tank connector.
Options include: power supply, junction box assembly, mounting kit, bund alarm.
Power supply to the standard unit is 15 to 28 vdc.
AC Mains power supplies are available for 100 vac to 250 vac.

Tank connection may be one of three methods.

A/ Low level external onto a valved free access point.

B/ Top entry by way of an existing free connection.
The minimum size we need is 1" BSPT or NPT.

C/ Where no free access is available, the OLE 30 mm expanding seal is ideal.
Cold Bore tank top with a hole cutter 30 mm clearance hole. (zone 2 / safe area only)
Insert the expanding fitting and tighten, ensuring the O-ring makes a suitable seal on the tank surface.
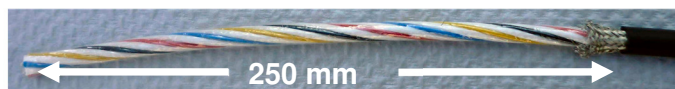(This fitting is suitable for Tank Testing up to 10psi / 0.7bar)

Bund Alarm float switch use the same tank fittings

2. Probe installation. Top of Tank.

** Make sure the probe you have is right for the tank.

Sensors should match tank height and product. Specific gravity must be considered here.

Measure the depth of the tank, and install the probe either onto the bottom of the tank, or suspended 50 or 100 mm above the bottom. (This may avoid possible water / sludge affects on the probe sensor, optional)

If a junction box assembly has been ordered, allow for some height adjustment when the sensor is in the tank. Strip back 250 mm of the outer sheathing, and use the nylon cords to tie and support the weight of the sensor.

250 mm

Cut the vent tube to around 30 mm long, and cut the conductors to 170 mm long. Using the terminal block provided, connect the wires to the interconnecting cabling. This should be twisted screened pairs, back to the display.
The enclosures glands are such to allow atmospheric pressure equalisation
(See additional data sheet for ATEX Eex applications).
Silica gel packs are fitted to absorb any moisture. (Air flow is minimal)
BROWN = Pressure sensor +24vdc **GREEN** = Pressure sensor –ve
Temperature PROBE sensor if Fitted (**TP = Blue Green**)

If Not using a junction box, clamp the sensor cable with the cable gland on the tank connection point, and wire the sensor cable direct to the display.
For Zone 0 / 1 Applications, the sensor should be marked with an EexiaIIcT6 and a barrier system must be incorporated in these circuits. [Eex].

CAUTION: Do not damage the outer sheath of the sensor. This may cause liquid to enter the cable and damage the transmitter circuit.

STD Sensors

B29 =0- 1 Meter
B30 =0-1.5 Meter
A12 = 0-3.0 Meter
A14 = 0-5.0 Meter
A16 = 0-10 Meter
A18 = 0-20 Meter
A20 = 0-30 Meter

To test the sensor Output. Power down, Break the **GREEN** wire Circuit. Insert in series a multi-meter set on DC Milliamps (20 range if not AUTO).
Power up the system and you should read milliamps, between 3.9 and 20. If so sensor is GOOD.
If less than 4.00, the display may read 'LOW' when the tank is empty. This is OK, or can be adjusted if required using the configuration software and connection lead kit. (T4020-01)
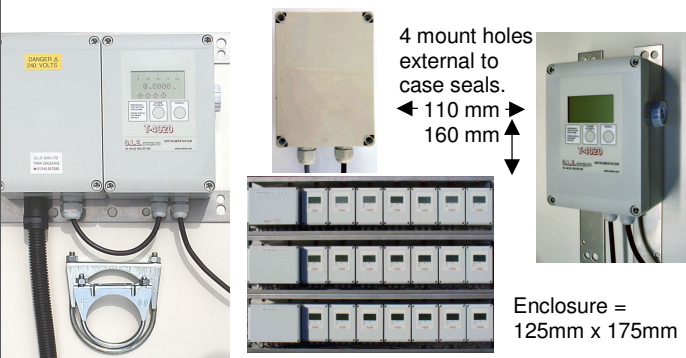
3. Display mounting.

The displays may be mounted on walls or panels by utilising the displays own mount holes. These will retain the IP66 integrity. Allen Cap or Cross Head M4 is ideal for this. (Hole positions are shown on back moulding)

The universal mount bracket available from OLE allows for wall mounting Or 2" U-Bolt, or 3" U-Bolt Pipe mount. The design allows for either Single display mount, or power box and single display mount. or Single display and T3100 remote monitor, or a Dual display.

4 mount holes external to case seals.
← 110 mm →
160 mm

Enclosure = 125mm x 175mm

4. Software and Firmware Versions

The T5020 shows the Firmware version top right when first powered up. This will read 3.1 or similar. Version 2.4 and later have an automated time-out on the scroll screen function.
Configuration software (Same as T4020)
This will be written on the Serial number label on the back of the circuit board. Versions 1.0.016 onwards are backward compatible.

Connect to the device by way of an RS485 to USB connection converter, or if using the T3100 web based logger, this can be used to remotely calibrate the device. (These can be hired or purchased from OLE)

Configuration of the gauge requires 4 screens to be populated. This data should be recorded, and retained for future reference.

A current (milliamp) simulator is recommended to verify the configuration is correct, and also helps in setting alarms and tank sizes correctly.
These can be hired or purchased from OLE T4020-SIMUL

5. Operation

The T5020 is very simple to operate. There is a Scroll button, which shows Tank Name, Capacity and Ullage space.
This will show for 5 seconds before reverting to the standard display.
There is an Alarm / Test-Mute button. Press and hold for 5 seconds to test the alarm (If fitted). Press again to mute the alarm.

If an alarm has been 'Muted' the Alarm symbol shows a crossed out image.
If Temperature display has been ordered, this will show bottom right of the display in Degrees Celsius.
If a Bund Alarm is incorporated, this shows as a 'B' on the bottom right. The temperature display in this instance shows centrally at the bottom.