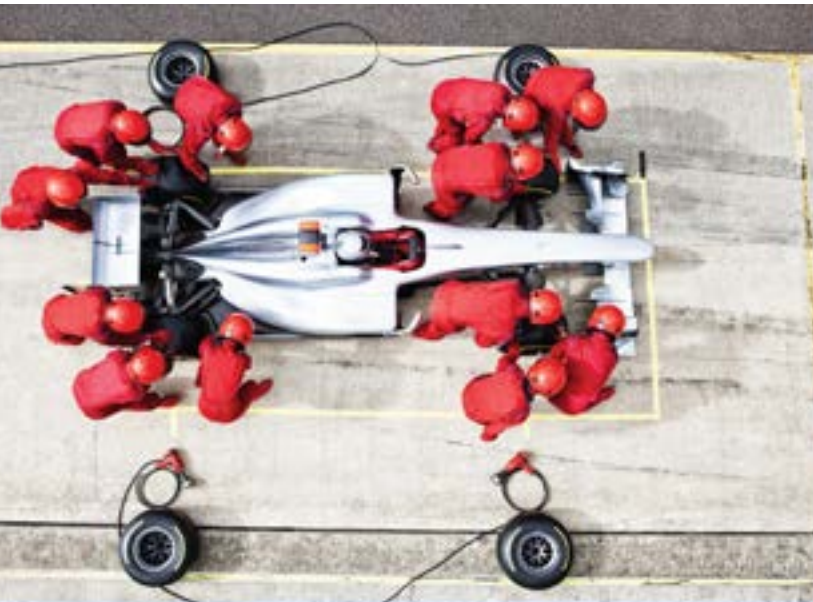


LevelLite

Lightweight, precision liquid level sensors

Optimise track and air performance with total reliability



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LIGHTWEIGHT, ROBUST

Constructed from high quality 6082 aluminium, LevelLite offers maximum robustness whilst maintaining a lightweight package that minimises the impact on power/weight ratio.

ACCURATE

Sub-millimetre precision liquid level measurement delivered by encapsulated electronics for total accuracy and reliability. Fuel or coolant use can be optimised with total confidence for faster laps or extended aerial range.

QUALITY

Rigorously tested during development and produced to strict quality standards to provide long endurance in arduous conditions – fit and forget!

FLEXIBLE

With 13 000 possible configurations, LevelLite has standard options to meet any tank configuration or fitting design challenge.

FAST DELIVERY

Despite many possible configurations LevelLite has short lead times. Custom manufactured in as little as two weeks.

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Product Description

LevelLite liquid level sensor is a championship winning capacitive level sensor for applications that value lightweight components, measurement accuracy, high quality durable construction and design flexibility. Whether you're looking for every tenth of a second on the track or need to maximize the range of your UAV, this sensor is designed to be the best in class solution.

With a rich set of features this highly configurable sensor is trusted by motorsport teams and UAV manufacturers across the world.



Did you know?

LevelLite lightweight liquid level sensor has been fitted to multiple world championship winning cars. We are proud to list multiple Formula 1 championships, Le Mans 24, World Endurance Championships and World Rally, to name but a few.

Product Success

For many years Gill have been known as the go-to supplier for custom designed liquid level sensors. LevelLite is an amalgamation of those years of experience, offering multiple configurations and features on a super short lead time.

Now installed in many military and civilian UAV's, alongside motorsport applications, LevelLite brings fuel, oil and coolant measurement to applications where overall weight must be minimised.



Installation Flexibility

LevelLite is a 2 piece solution, meaning the mounting adaptor and sensor are two separate parts. Gill offer 5 different options for flange or thread mounting. We also make the design details available so that customers can design their own adaptors to suit their application.



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Sensor Benefits

LevelLite has proven performance in both motorsport and aerial applications due to its industry leading features;

- lightweight to maximise speed, payload and range
- high measurement accuracy for reliable fuel and distance optimisation with total confidence
- construction quality - robust aluminium construction with encapsulated electronics for lasting performance
- flexibility - over 13,000 mounting and configuration options allow accuracy down to a single millimetre
- compatibility - accurate measurement of fluids including fuels, coolants and oils

DID YOU KNOW?

You can connect LevelLite to a PC or Laptop for easy configuration. We recommend FTDI USB to RS232 converters. You can buy them from us or we can help you with a part number for local sourcing.

Product Review

What our customers say:

"The [Gill] sensors last forever, they really are fit and forget!"

Senior electronics engineer – Indycar racing team



Precise Measurement

LevelLite not only combines light weight with robustness for extreme applications, it is also available in lengths specified to the millimetre. Having the ability to measure down to that last drop delivers confidence in the speed and range a vehicle can safely operate within. Whether it's measuring fuel, coolant or oil, LevelLite allows your vehicle to deliver trusted performance.



Water



Coolant



Oils



Petrol



Diesel



Bio-fuels

Application Story

Gill are pleased to say that we are now involved with many road going Hypercar projects across the world. Our extensive product testing regime means that the product is ready for use in "on road" applications.

We have now started production on one of the most highly sought after Hypercar programs in the world. The program is set to produce a limited run of cars with a price tag of £2.5M apiece and LevelLite is a key component.

LevelLite sensors are measuring coolant levels in the vehicle power electronics and electric motor cooling circuit.

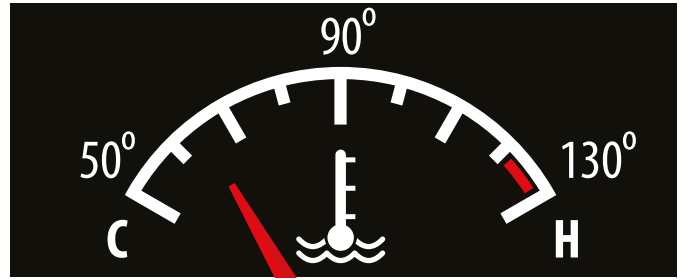
You will find LevelLite is available via the International Material Data System (IMDS) database with all recyclable components listed with their weights.

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Output Options

LevelLite uses industry standard communications protocols with the ability to set custom ranges where required. The unit provides a primary output and a choice of secondary outputs. The primary level output has a maximum range of 0.25V to 10V, though it is normally configured for 0.25 to 4.75V operation. There are two choices of secondary output. The standard version has an open collector switch to drive a reserve level LED or ancillary system (see our website for suggestions on how best to use an open collector switch). As an optional extra, LevelLite can be configured with a secondary analogue output to provide temperature data from -40°C to $+125^{\circ}\text{C}$. Mounted in the tip of the probe, the temperature sensor gives continuous liquid temperature data from inside the tank.



Level for Electric Vehicles

With many race series moving to electric drive trains in recent years there is less demand for fuel level sensors, yet there is an increasing need for coolant level. LevelLite is designed to measure the new coolants used in state-of-the-art electric motor cooling systems. With a chemically inert insulative layer between the sensor electrodes, LevelLite can measure electrically conductive liquids such as water and electronic cooling fluids.



LevelLite Product Data

Features

- Compatible with fuels, oils and coolants
- Multiple mounting flange options
- Lightweight aluminium construction
- -40°C to +125°C operating temperature range *
Refer to product datasheet for temperature derating
- Tank volume output
- Weight (excl. cable) 48g (100mm probe + 0.256g/mm)



Output	
Primary output	0.25 - 4.75V (max range 0.25 - 10V)
Secondary output standard option	open collector switch
Secondary output temperature option	0.25V = -40°C , 4.75V = +125°C

Lengths
100mm - 750mm in 1mm increments

Special lengths available on request

> View Datasheet

GSlevel Software

GSlevel provides a modern, simple to use and intuitive way of customising output settings, minimum and maximum levels, alarm switch level and hysteresis conditions.

GSlevel gives the user the ability to achieve a volumetric output using its tank profiling feature. Users can customise the configuration of the sensor using GSlevel via the serial communications lines. Connection to USB ports is possible with a Gill recommended USB to RS232 converter.

Volumetric data can be transferred between sensors by export/import of a .csv file.



Where to buy

Gill sells its products through a worldwide network of trained [distributors](#), so you can count on the very best advice for your application.

For further information on LevelLite, including manuals and datasheets, please click below.

> Learn more

> View Technical Specifications

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