

# OPTILEVEL

THE UNERRING



SIMPLY PERFECT

# OPTILEVEL ELECTRONIC LEVEL

# OPTIL

## Gauge HLS 3010 HF / 5010 HF

The HLS 3010 / 5010 HF gauge works using the capacitive comparison method, has no moving parts and is therefore not subject to any wear and tear. The gauge senses any change in fluid and automatically adapts to the new medium. The measuring process used is independent of pressure and temperature. Water and temperature measurement is standard. The probe is produced in different lengths and can be used with different tank diameters. This means it can be used worldwide as the screw joints are offered in different standard thread sizes. Another special feature: The probe can also be installed in LPG.

## SCREW JOINT

A G 1.5-inch thread or an NPT 1.5-inch thread allows easy clamping in place. While the probes for traditional tank equipment have screw joints for clamping, the liquid petroleum tanks versions (LPG) have a fixed welded sleeve to ensure a secure joint. This sleeve has passed all pressure tests with flying colours and can withstand without any problem a pressure of 20 bar, which can arise with LPG.

## GAS PIPE

A solid 1.5 inch gas pipe guarantees extreme robustness. Teflon and stainless steel are the only materials to come into contact with the media. A float which can be susceptible for instance to sticking is not used. Thanks to this arrangement the maintenance costs are virtually zero.



## PROBE HEAD

All the electronics are located in the probe head and can be completely exchanged in just a few minutes with the probe installed and during tank operation. By means of the integrated microprocessor all relevant data (volume, temperature, level) are shown on a digital display. The additional release of the H-protocol on the probe allows parallel operation of two protocols (H-protocol and Hectronic-protocol) and for that direct connection to the POS-system, which supports these protocols. Tank table management occurs on the probe itself. When the medium is changed there is no need for any adjustments to be made, as the EX-approved OPTILEVEL probe is self-calibrating. Submersible pumps do not affect the probe. The probe is leaktight according to IP 68, e.g. even for prolonged periods in water.



## SENSOR

Density measurement, which is optional, takes place at the bottom of the probe via a pressure sensor. In so doing it is possible to recognise and display changes in density. This means that stretching or mixing fuels is immediately identifiable.



## PRODUCT MANAGER

**KENNY REICHEL:**

“Do you want to receive absolutely correct data for your tank contents automatically and quickly? Working one hundred percent, without any problems or breakdowns requiring call-out? In short: Would you like to earn more money and make savings on your measurement system? Then I have exactly the right solution for you: OPTILEVEL!”

# EVEL



## PRECISION TANK INSIGHT

### YOUR BENEFIT

1. long lifetime with minimum maintenance costs
2. easy installation with low investment
3. perfect logistics thanks to rapid data processing

OPTILEVEL is the ideal system for modern tank gauging. The HLS 3010 / 5010 HF probe, which has undergone thorough, tried and tested technological development, the well-thought out system architecture, open interfaces and a range of useful peripherals such as user interface, printer, truck driver display and in particular the Controller 104M Basic/Master in connection with the software modules Alpha and Beta make OPTILEVEL the best choice for your petrol station. It offers exact registering of fill level, water level and temperature and so gives you precise insight into your fuel tanks. This system, which is based on a capacitive measurement process offers even more advantages. Thanks to this technology, OPTILEVEL is insensitive to outside factors such as conductance, additives, dirt film, submersible pumps, foam, vapour, sump or vibrations. Dispensing with moving parts makes it extremely reliable and wear-free. A refined product for tough everyday use.

#### Easy to install and service-friendly

The probe can be screwed into a G 1 1/2 inch sleeve in the manhole lid without any additional covering parts. All the electronics are located in the probe head and can be completely exchanged with the probe installed and during tank operation in just a few minutes.

#### Nothing bothers the probe!

Whether it is permanently flooded manhole pits, aggressive or explosive fluids or very cold (-25°C) or very hot (+100°C) fluids, OPTILEVEL handles it without any problem. Even electromagnetic fields created by a submersible pump do not affect the probe - it can even be fitted immediately next to it. Furthermore there is no need for any additional still pipe to absorb any wave motions that may occur. The probe itself offers allround protection.

## OPTILEVEL CAN DO ALL THIS

**Supply identification:** OPTILEVEL automatically registers the quantity and time of a delivery.

**Leak detection:** OPTILEVEL monitors both the tank and the piping system. Even the tiniest irregularities are immediately identified.

**Automatic control of incorrect quantities:** OPTILEVEL compares the sold quantity and the actual quantity in the tank. At the same time of course it takes account of variations caused by temperature changes.

**Automatic tank calibration:** Standard tank tables are loaded or calculated and OPTILEVEL corrects them automatically to ideal tables for each particular tank.

**"Meter Mapping":** OPTILEVEL automatically allocates the pumps to the appropriate tanks. This also applies to MPDs.

**Measuring density:** OPTILEVEL detects changes in density. Using this data you can see immediately if something is wrong with the tank contents. Whether it is water running into the tank or the supply of adulterated fuel. More certainty would be hard to get.



FACTS,  
FACTS,  
FACTS ...

**Hectronic**

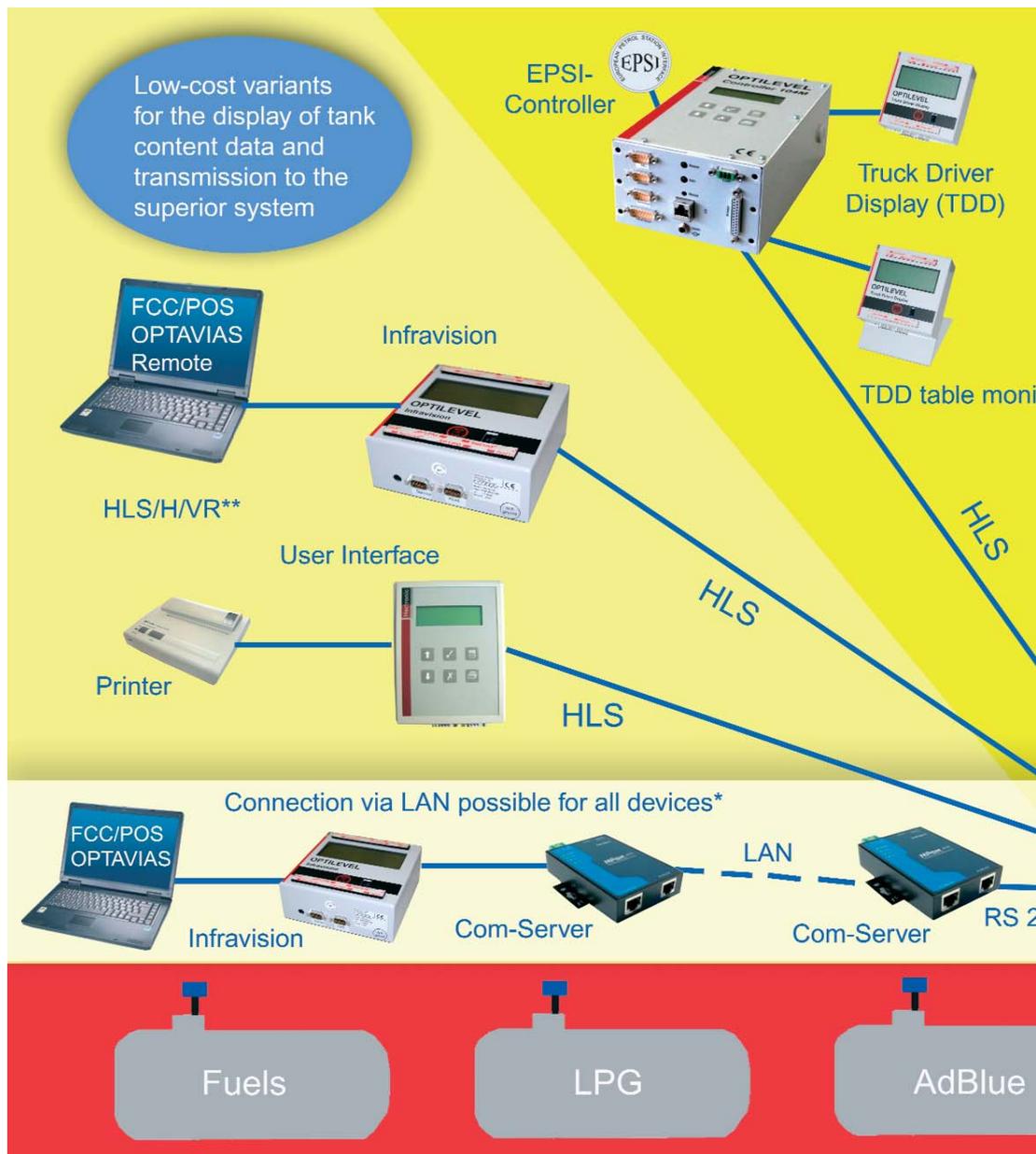
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## TECHNICAL DATA

### Gauge HLS 3010 HF / 5010 HF LPG, Adblue

Tank size (height)	800 mm to 6000 mm
Flange	1.5" G or 1.5" NPT thread
Contact medium materials	stainless steel, teflon
Probe head tightness	IP68
Certificates / Approvals	PTB 03 ATEX 2114 IECEX TUN 04.0023 CSA 1600476 GOST D.E.C. 29.010 A CCOE P162760
Temperature range	
Medium	-25°C to +100°C*
Ambient	-25°C to + 60°C

\*For the application in the Ex-zone 60°C max.

Measured data for resolution	Water: +/- 1mm Medium: +/- 0.1mm Density: +/- 5 g/l Temperature: +/- 0.1°
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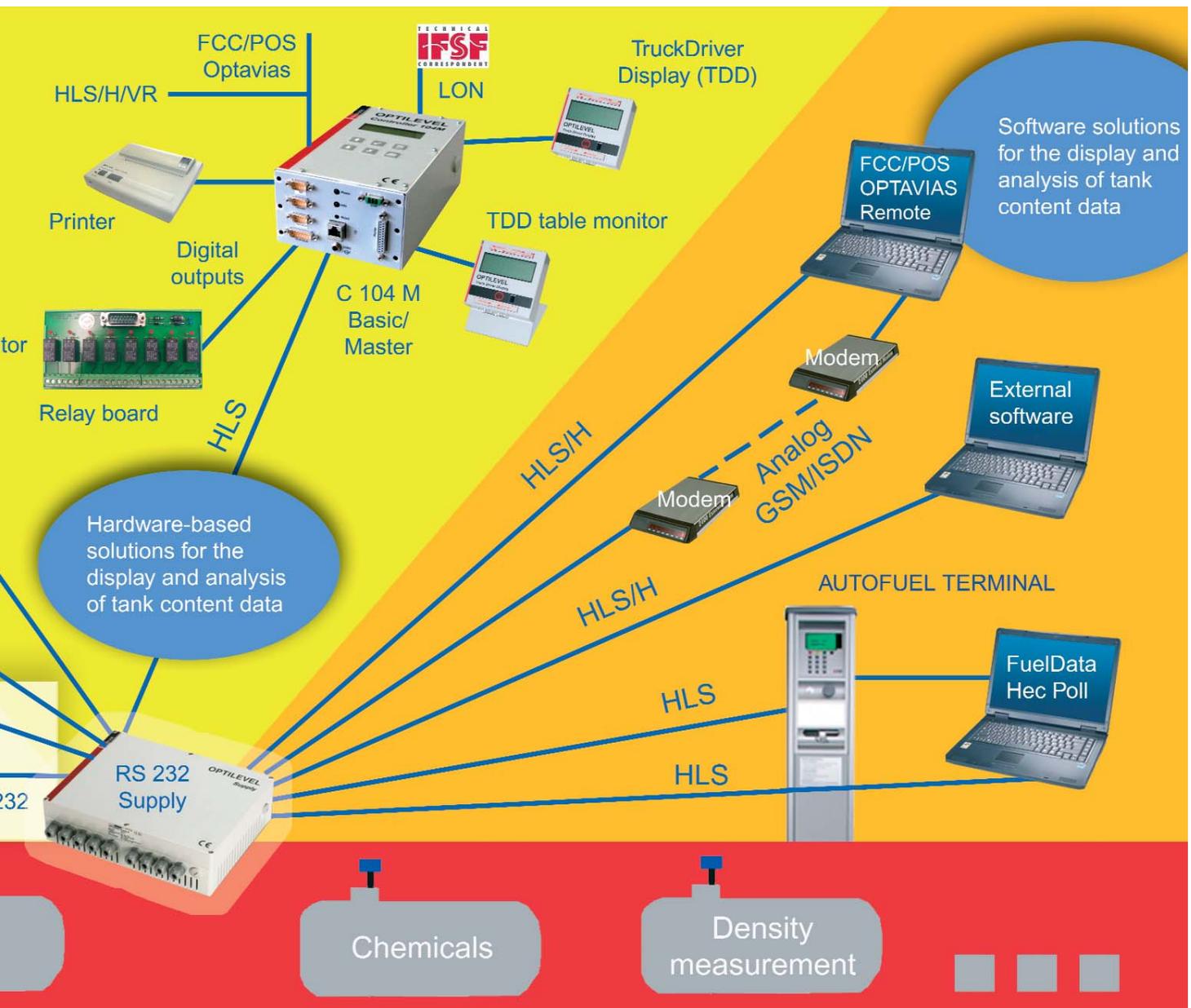
## Available protocols

### OPTILEVEL Supply

Number of gauges	1, 4, 5 or 8 gauges per module; can be extended up to 4 modules and 32 probes in all
Dimensions in mm	W 300 x H 230 x D 85
Certificates / Approvals	TÜV 98 ATEX 1382 IECEX TUN 04.0024 CSA 1600476 GOST D.E.C.29.010A CCOE P162760

### Controller 104M Basic/Master, LON, EPSI

Display (104M Master)	LCD 4 X 20, H= 4,8 mm, backlit, (bei Version Master)
Dimensions in mm	W 140X H 230 X D 60
Available protocols	HLS-, H- and VR-protocol



**Connection options**

parallel printer  
Truck Driver Display,  
Digital out- and  
inputs

**Truck Driver Display**

**Display** LCD 4 X 20,  
H= 9 mm, backlit

**Dimensions in mm** W 160 x H 160 x D 60

Connection to 104M Controller  
Scrolling via infrared sensor  
Can be mounted directly to the shop's windowpane  
Table monitor version available

**User Interface**

**Display** LCD 4 X 20,  
H= 4,8 mm, backlit

**Dimensions in mm** W 130 X H 170 X D 45

**Connections** 2nd serial interface for a printer

**Infravision**

**Display** LCD 4 X 20,  
H=9 mm, backlit

**Dimensions in mm** W 160 x H 160 x D 60

**Connections** 2nd serial interface e.g. for POS systems HLS, H and VR-Protocols\*\*

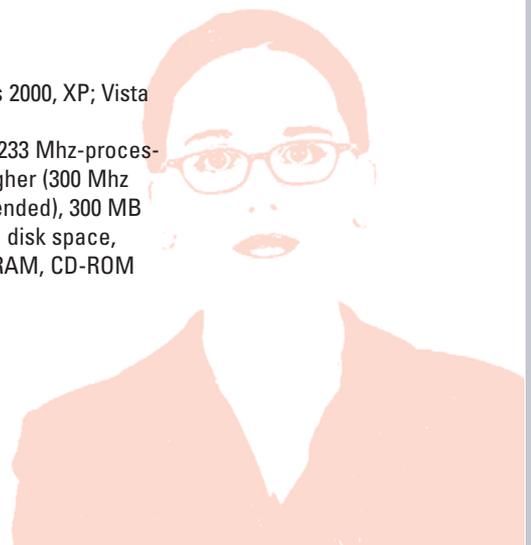
Table monitor version available  
\*\*without sales data and alarms

**Optavias**

**Operating system** Windows 2000, XP; Vista

**Hardware** Pentium 233 Mhz-processor or higher (300 Mhz recommended), 300 MB free hard disk space, 128 MB RAM, CD-ROM drive

\*Connection also possible with RS 485 interface converter with W & T adapter



# OPTILEVEL

## THE CHOICE IS YOURS!

### CONFIGURATION OPTIONS WITH OPTILEVEL



The basis: the OPTILEVEL supply forms the basis, for all probes are connected to this supply. It provides the opportunity to exchange information with up to 32 probes directly via a RS 232 serial interface. From this point, you can connect to automatic pumps, POS systems or modems and controllers, etc.

### INDIVIDUAL OPTIONS FOR YOUR PARTICULAR REQUIREMENTS:

#### 1. Direct connection to Autofuel Terminals .....

You can connect all Autofuel Terminals from Hectronic and various POS systems directly to the supply. Analyses can be made via the software FuelData or the Autofuel Terminal's display.



#### 2. Standalone/User Interface .....

This cost-effective solution is restricted to standard data. The display is connected directly to the supply. All relevant information, such as product, volume, free space and temperature of up to 8 tanks can be called up.



#### 3. Infravision, the mini-controller .....

The Infravision display is designed for direct connection to the OPTILEVEL supply. The underlying probe data is distributed to host systems, as chosen with the Hectronic, H or VR protocol via the display's second serial com port. By dispensing with the ALPHA and BETA software modules, Infravision provides you with a cost-effective solution for viewing tank content data.



#### 4. Optavias .....

Optavias is the software for connecting probes directly to a PC. All functions, such as strapping table management, volume conversions, temperature compensation (conversion to normal temperature), boundary value instructions with visual and audio alarms are incorporated. All data stored in the database can be analysed and evaluated graphically and in table form via a user-friendly interface.



#### 5. Controller (104M Master/104M Basic/EPSI/LON) .....

The OPTILEVEL controller provides you with a comprehensive view into your tank. It reads the millimetre data from the probes, converts it into volume/litres and translates this into the appropriate protocol so that it can be read at the POS. At the same time, it is a compact and flexible analyser of this data. Nothing offers you more.

