

MEASURING MADE EASY.

Smart and simple measurement of tank levels. With tank gauges

from TECALEMIT.











Signs of the times

The development of our tank gauges!

In 2000, we started the in-house development of a tank gauge, which was launched in 2001 under the product name LevelMaster. With the LevelMaster, the fill level of up to eight tanks could be monitored using hydrostatic level probes. The first versions were available with analogue, then later with ISDN and GSM modems. The data was evaluated using Windows PC software. In 2004. the cost-efficient offshoot LevelMaster Compact was launched with a reduced range of functions.

With increasing use of the Internet, it became apparent that customers were demanding a web-based evaluation option independent of the operating system with correspondingly connected gauges.

In 2005, the Internet-based platform LevelController.net was introduced, almost simultaneously with the devices in the LevelController family, which communicated directly with the LevelController web server. Customer access to the data was via Internet Explorer, which was still in use at the time.

In 2008, the LevelController family was expanded to include LevelController 4 for level monitoring of up to four tanks.

A special feature was the LevelController TS WHG introduced in 2009, which also has approval for use as a level switch as part of an overfill protection system.

The LevelController.net web server was expanded several times until the switch to the new userfriendly myTecalemit cloud took place in 2019.

In 2020, the TecSonic devices that measure by ultrasound were launched. In addition, the myTecalemit cloud has been expanded to include further evaluation export options for the fill level data.

TECALEMIT level measurement technology thus continues to enable optimal supply planning and remains an important link in the quality assurance chain.



Measuring principles

How does it work?

The tank gauges at TECALEMIT work with a wide range of measuring principles - get an overview of the respective advantages and disadvantages!

Inexpensive and simple

Ultrasonic principle

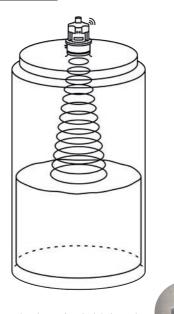
The level is measured in a similar way to an echo sounder via an ultrasonic signal emitted by the sensor, which is reflected on the liquid surface and received and evaluated by the sensor.

ADVANTAGES

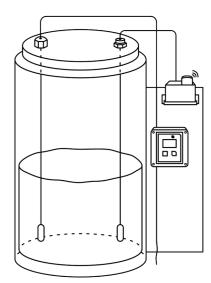
Easy to install

No moving parts in the tank

Cost-effective



The ultrasonic principle is used by the following tank gauges TecSonic (from page 8)



The hydrostatic principle is used by the following tank gauges: TecLevel (from page 10) • LevelController (from page 12)



Accurate and expandable

Hydrostatic principle

Due to their density, each liquid has an individual weight force, which exerts increasing pressure on a tank base as the fill level increases. This pressure is proportional to the liquid level and is detected by a probe.

ADVANTAGES

Highly accurate measurement

Tank geometry not relevant

Most reliable measuring method

Special form: Beading procedure

The beading process is a special form of hydrostatic level measurement. Compressed air is blown in through a thin hose to the bottom of the medium; the resulting overpressure is measured and corresponds to the liquid column.

www.tecalemit.de/en



Hydrostatic vs. Ultrasonic

The choice is yours

Our wide range of tank gauge products enables our customers to find the right system for their

Always up-to-date on the respective fill levels of your tanks and no more cumbersome, manual visual inspections. Optimise your diesel delivery with our tank gauges and be warned when levels Choose between simple systems for single tanks or systems with connection for up to 4 tanks! Get an initial overview – we will be happy to help if you have any further questions!





	Hydrostatic principle (e.g. LevelController)	Ultrasound principle (e.g. TecSonic mobile)
Power supply	230 V/50 Hz	Battery
Preciseness	Up to 0.50%	Up to 2 cm
Measuring height	Depending on probe type, 10 m is also possible	Up to 3 m
Reporting frequency	Up to hourly	1x daily
Display	Yes (5-digit)	No
Buttons	Yes	No (controlled via myTecalemit)
Switching-/alarm contacts	Yes (e.g. tank empty shutoff/min-max)	No
External antenna	Yes - as an option (e.g. for cellars, ground tanks)	No
Installation	Flexible via a 1" screw connection	Rigid via a free tank opening with 2", 1 ½", 1 ¼"
Special feature	Cable between probe and device can be extended up to a length of 200 m using a special terminal box	Use of a waveguide tube for guidance of the ultrasound possible (if pipes in the tank interfere with or distort the signal)
Ideal for	Professional solution with display - also suitable for difficult installations	Affordable entry-level solution if the installation situation permits. Location-independent thanks to battery.



TecSonic series

Ultrasonic tank gauge

TecSonic is quick to install and requires no additional parts - ideal for beginners and for a single tank.











Level measurement couldn't be easier: Screw on, activate and manage in myTecalemit level module: The TecSonic is our entry-level model for smart level measurement.

The handy and lightweight TecSonic usually does not require any additional accessories and is therefore low-wear. Via the myTecalemit fill level module, you can call up the fill levels reported on a daily basis and be notified of threshold values.

Available as a mobile phone variant (including SIM card without subsequent communication costs) or Wi-Fi variant (requirement: good Wi-Fi reception in the fuel tank area).



Works with

myTecalemit

diesel eco fuels

(GTL, HVO, R33)

Cloud

ADVANTAGES

Quick and easy to install

Affordable entry-level model

Low wear, as no other parts

Comes with SIM card without follow-up costs

Cellular or Wi-Fi variant













	DAITERY POWERED	DATTERT POWERED
	TecSonic mobile 2G	TecSonic mobile 4G
Data transfer	GSM/GPRS (2G)	LTE (4G)
Connection thread	1 ¼", 1 ½", 2"	1 ¼", 1 ½", 2"
Protection class	IP 67	IP 67
Preciseness	2,0 cm	2,0 cm
Voltage supply	Battery 4x 1,5 V C LR14	Battery 4x 1,5 V C LR14
SIM card	incl., without costs	incl., without costs
Tank height	12 cm to 3 m	12 cm to 4 m
Probe	-	-
Display	-	-
Alarm contacts	-	-
Ambient temperature	-10 to +50°C	-20 to +50°C
Dimensions (mm), W x H x D	approx. 101 x 93 x 150	approx. 101 x 93 x 150
Weight	approx. 503 g	approx. 503 g
Item number	225 800 200	225 800 400





1	R	U	U	U	W
	BAT	TER	Y PC	WEF	RED
	Soni	c wi	fi		

	TecSonic wifi		
Data transfer	Wi-Fi, 802.11 b/g/n		
Connection thread	2"		
Protection class	IP 67		
Preciseness	2,0 cm		
Voltage supply	Battery 3,6 V LI-SOCI		
SIM card	-		
Tank height	12 cm to 3 m		
Probe	-		
Display	-		
Alarm contacts	-		
Ambient temperature	-17°C to +50°C		
Dimensions (mm), W x H x D	approx. 109 x 109 x 108		
Weight	approx. 227 g		
Item number	225 800 100		

For diesel, radiator antifreeze concentrate, fresh oil, waste oil, AdBlue and water



















TecLevel series

Hydrostatic tank gauge

The TecLevel is the specialist when it comes to a wide range of media and minimal space requirements on the tank.













The TecLevel is easy to install, generally does not require a free tank neck and can be mounted on fixed or mobile, free-standing or underground tanks.

Thanks to the hydrostatic measuring principle, extremely accurate measurement is possible - even for special tank structures. Via the myTecalemit fill level module, you can call up the fill levels reported on a daily basis and be notified of threshold values.

Our TecLevel ATEX is also suitable for carburettor fuels and various chemicals.



diesel eco fuels

(GTL, HVO, R33)

Works with

myTecalemit

ADVANTAGES

Does not require a free tank filler neck

Highly accurate measurement

External antenna for ground tanks

4G data transmission (with fallback mode to 2G)

Battery with up to 10 years life time

Comes with SIM card without follow-up costs

Available in ATEX version











	В	F	1	T	T	E	R	N	7	P)(0	V	V	E	I	\$ E

	TecLevel eco		
Data transfer	LTE (4G)		
Connection thread	incl. adapter G 1" u. 2"		
Protection class	IP 68		
Preciseness	+-2%		
Voltage supply	Battery 3,6 V LI-SOCI		
SIM card	incl., without costs		
Tank height	up to ca. 3 m*		
Probe	300 mbar, 5 m		
Display	-		
Alarm contacts	-		
Ambient temperature	-20 to +55°C		
Dimensions (mm), W x H x D	approx. 130 x 125 x 60		
Weight (incl. cable)	approx. 1.045 g		
Item number	225 810 100		









	BATTERY POWERED
	TecLevel ATEX
Data transfer	LTE (4G)
Connection thread	incl. adapter G 1" u. 2"
Protection class	IP 68
Preciseness	+-2%
Voltage supply	Battery 3,6 V LI-SOCI
SIM card	incl., without costs
Tank height	up to ca. 3 m*
Probe	300 mbar, 5 m
Display	-
Alarm contacts	-
Ambient temperature	-20 to +55°C
Dimensions (mm), W x H x D	approx. 130 x 125 x 60
Weight (incl. cable)	approx. 1.045 g
Item number	225 810 200

For diesel, radiator antifreeze concentrate, fresh oil, waste oil, AdBlue, fuel, water and chemicals























LevelController series

Hydrostatic tank gauge

Mains-operated and for up to four tanks at the same time - our LevelController series!













The LevelController series runs on mains supply – for professionals and anyone who wants a little more.

Equipped with a keypad and display, the LevelController can be controlled both directly on site and remotely via the LTE module. Via the myTecalemit fill level module, you can call up the fill levels reported on a daily basis and be notified of threshold values.

The LevelController PS uses the beading method (a special form of hydrostatic measuring principle), while the LevelController TS and LevelController-4 measure with immersion probes.



ADVANTAGES

Manage levels of 4 tanks simultaneously

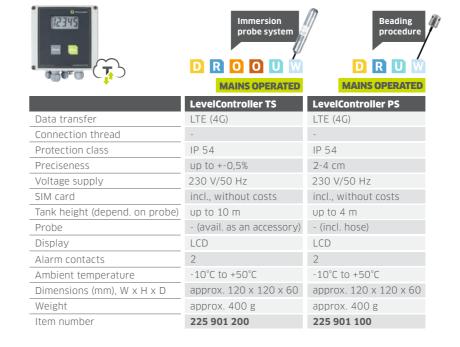
4G data transmission (with fallback mode to 2G)

Affordable solution with easy installation

Comes with SIM card without follow-up costs

Comes with Display for direct control







For diesel, radiator antifreeze concentrate, fresh oil. waste oil. AdBlue and water



















Accessories

For LevelController	Item no.
Magnet antenna 2.5 m cable	225 600 000
Extension for antenna, 4 m	225 600 001
External antenna for LC-4	225 600 002
Signal horn 230 V/50 Hz	028 552 201
Signal lamp 230 V/50 Hz	028 553 301

Specially for LevelController TS	Item no.
Probe 300 mbar, 5 m long	224 020 020
Probe 500 mbar, 7 m long	224 050 010
Probe 300 mbar, 10 m long	224 020 021
Protective box Ex barriers	224 060 000
Terminal box with filter	224 061 000
Stainl. steel pipe cable rout. 2,3 m	224 070 004
Stainl. steel pipe cable rout. 3,4 m	224 070 005
Stainl. steel pipe cable rout. 5,4 m	224 070 006
LevelController mounting set 1"	224 070 010

myTecalemit	Item no.
"Reporting & Service" module	227 000 100
"Fill level" module	227 000 200
"Full-Service-Package"	227 000 300
2-h-support Teamviewer	227 702 800

For TecSonic mobile	Item no.
Signal tube 2 m as waveguide	225 800 020
Signal tube 3 m as waveguide	225 800 030
Combination vent cap 2"	225 800 050

Would you like to find out more about our accessories for tank gauges?

You will find a selection of accessories and other items on www.tecalemit.de/en under Products > Measurement technology > Accessories > Level measurement



Seminars & workshops

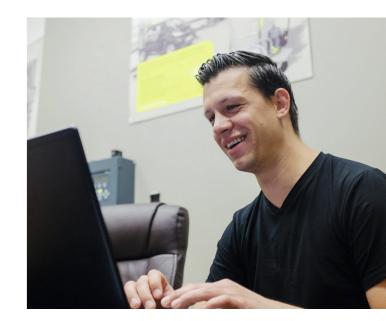
Tailored to you and your employees – in-house or online

We offer workshops and seminars on our tank gauges – feel free to contact us!

Is my tank gauge suitable for my existing system? How do I operate the device correctly? These and more questions can be clarified - in our company seminars!

Get to know selected TECALEMIT products together with us, understand their applications and possible uses, and integrate what you have learned into your day-to-day work.

These courses provide you with comprehensive insight into the chosen subject area. You will receive sound background knowledge in combination with practical exercises.



ADVANTAGES

Questions can be clarified immediately

Team is strengthened together

All product features usable

Incorrect operation of the devices is prevented

Practical units directly on the device

Background information on the product

Register with:



Finn-Birger Petersen After Sales Service

+49 461 8696-115

finn-birger.petersen@tecalemit.de



We're on YouTube!

Did you know we have a YouTube channel called "TECALEMIT Germany"? It contains many practical installation videos for our products - watch them now!

myTecalemit

Cloud-based dispensation data management

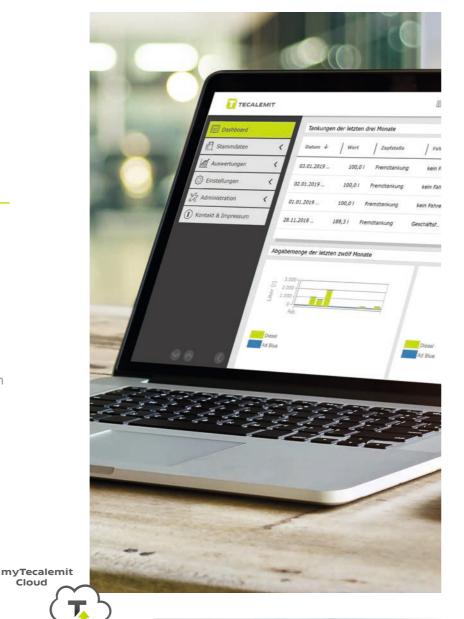
Use selected products with myTecalemit - get the most out of your dispensation systems!

We network products, devices, people, and companies – in a manner that is smart, cost-effective, time-saving, and flexible. Optimize the workflow and increase the productivity of your company.

The Full-service-Package from myTecalemit offers everything you require for the optimal management of your dispensation systems: Seamless recording and logging of all dispensation procedures and tank levels as well as graphical processing, alarm messages, and service notifications.

You can easily check the tank contents or view the total diesel consumption for the same month in the previous year. And if you wish, you can automatically have a new tankload ordered from your trusted diesel supplier.

All this is possible - with the Full-service-Package from myTecalemit!





Everything at a glance with myTecalemit!

THE tool for fluid management!

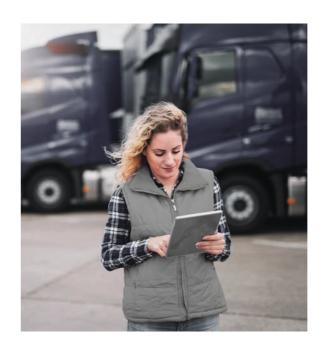
"Feel free to call me and I'll advise you on the possible uses of myTecalemit in your company - together we'll find the suitable module for you!"



Ingo Fischer Product Manager

+49 461 8696-123

ingo.fischer@tecalemit.de



Full-Service-Package

Item number

227 000 300

With myTecalemit, you have all the data at a glance - for all locations and from anywhere in the world. Using a browser of your choice, you can access the platform from any system or device.

The benefits:

• Safe and reliable

- Data security through https encryption
- Server location Germany
- Certified host (ISO/IEC 27001:2013)
- Verified password-protected user access
- Compliance with the DGSVO



All data at a glance

- Access from the office or on the go
- Cross-locational use thanks to simultaneous visibility of information
- Provision of updated data 24/7

• Easy to use and operate

- Clear design of the user interface
- Individual compilation of relevant information on the dashboard
- Intuitive operation

Flexibility from the cloud

- Up-to-date data through regular updating
- Available anytime, anywhere: in the office, on the truck or at home

• Device- and operating system-independent use

- Free choice of device and operating system
- No installation of apps
- Terminal server can be used
- Effectively work from home
- Data access in predefined user roles
- Further processing by export functions as CSV data, etc.
- Interfaces to third-party programs such as Agricultural Monitor, NEXTFarming



All data at a glance - from home or while on the go

Secure and reliable thanks to encryption

Intuitive user interface

Flexible and up-to-date

Can be used independently of any particular device or operating system

Work effectively from a home office







Fill level module

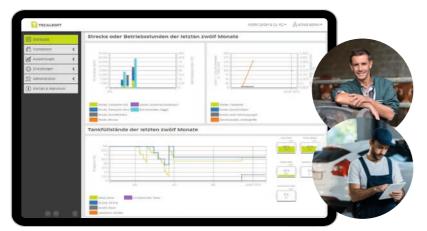
The management tool for your tank!

The level module from myTecalemit helps you log, manage and optimise productivity on your tank and level - all fast, easy and efficient!

Fill level module

Item number

227 000 200*



Intended for...

Private users

- Agriculture
- Industry
- Service workshop
- House (heating oil tank)

A wide range of options: Display of the current tank fill level and fill level history range estimation, supplier involvement and much more!

ADVANTAGES

Flexible and up-to-date

Avoiding dry running

Cost-saving benefits

Order as required

Time savings through supplier integration and external email recipients

View the tank level from anywhere

Free compilation of analysis

Entire TECALEMIT tank gauge family can be combined as desired incl. level measurement by HDM series (using probe)

... And what else is possible?

Threshold email notification

- Various threshold warning levels possible
- Send to any number of recipients
- Detection of tank filling levels
- Avoidance of dry running

Export options

- Involvement of suppliers through targeted approval of individually defined tanks or when on the move
- Automatic email reporting of any number of different evaluations at the desired time interval. e.g. daily, monthly, quarterly, etc. (also possible to external email recipients)

*when ordering the module for a TecSonic: 227 000 250

Supplier module

Manage multiple tanks conveniently, including customer access!

myTecalemit's supplier module is specifically designed for companies that need to keep an eye on many tanks - be it their own tanks or those of customers!*

*No extra costs, only the device fees will be charged as usual.



Intended for...

Company/ decision-maker

- Mineral oil trade
- Mineral oil delivery
- Industry
- Order coordinators

Everything at a glance: Fill levels of selected tanks, colour display of threshold values, sorting options by device, customer, content, postcode, free volumes - and much more!

ADVANTAGES

Very good tank overview

Colour detection of threshold values

Improved logistics planning

Trips and cost optimisation

Customer loyalty instrument

Proactive customer contact possible

Separate customer access

... And what else is possible?

Customer management for own tanks

- Creation of customers with address, customer number, contact person and comment
- Assignment of tanks to customers
- Customers can only view their own tanks via separate access. This allows the customer to add additional users if required

• For customer tanks via other myTecalemit account

- Possibility to define own threshold values and corresponding notifications
- Transferred product can be adapted to own
- Comment field

The supplier module is available on request and must first be activated by us.

If you have any questions about the supplier module, please contact Ingo Fischer, ingo.fischer@tecalemit.de



ABCs of fill level technology

Key terms, explained simply

What does "Zero point adjustment" mean and what is a "Waveguide" required for? Find out in our ABCs of fill level technology!



John Hofmann

After Sales Service



WWW.TECALEMIT.DE/EN "Have you visited our comprehensive website

at www.tecalemit.de/en? It answers frequently asked questions and explains common terms do drop by, we look forward to seeing you there!"



(MOUNTING) OFFSET

In hydrostatic measuring devices, the offset refers to the vertical distance between the tank bottom and the position of the fill level probe. In the case of ultrasonic devices, the mounting offset refers to the vertical distance between the mounting position of the device and the maximum fill level in the tank. Further details can be found in the operating instructions for the devices.



4G, 2G

With a few exceptions, our tank gauges transmit their data via the 2G or 4G mobile network. 2G has almost 100% network coverage in most regions and will continue to be available in the long term. More and more markets are only using 4G. Our 4G devices have a fallback mechanism to the 2G mobile standard if the 4G network has gaps.



ZERO POINT ADJUSTMENT

For hydrostatic measuring devices in the LevelController series, a zero point adjustment can be carried out before installing the level probe in the tank in order to further increase the measurement accuracy. Further details can be found in the operating instructions for the devices.



ALARM CONTACT

Depending on the version, the devices in the LevelController series have one to three alarm contacts to trigger a visual or acoustic alarm, for example, if a certain fill level is exceeded or fallen short of. Further details can be found in the operating instructions for the devices.



MAXIMUM TANK HEIGHT

For the correct functioning of our tank gauges, the maximum fill level in the tank must be determined and entered on the devices or in the myTecalemit cloud. As a tank is never filled to 100%, the maximum fill level is lower than the tank height. The maximum fill level can be found in the accompanying documentation for the tank.



DENSITY

For hydrostatic measuring instruments of the LevelController and TecLevel series, the density of the medium to be measured must be entered as accurately as possible on the instruments or in the myTecalemit cloud. Typical density values are, for example, 1,000 g/l for water, 840 g/l for diesel fuel or heating oil and 1,090 g/l for aqueous urea solution/AdBlue®. Exact values can be found in the manufacturer's data sheets.



ABBREVIATIONS TS AND PS

Our LevelController series uses different forms of the hydrostatic measuring principle. TS stands for the German word "Tauchsonde" (immersion probe). This is used to measure the pressure at the bottom of the tank and determine the fill level. The PS stands for "Pressure Sensor". Here, compressed air is blown into the sensor via a hose (see beading procedure) and the overpressure is measured.



Waveguide

Our ultrasound devices require a free area between the device and the surface of the liquid in order to function properly. In installation situations in which the ultrasonic signal is disturbed by fittings (e.g. suction lines) or tank walls, the waveguide can be used as a "guide" for the ultrasonic signal. The waveguide guides the waves for an optimal measurement result.

One for all, all for one!

We'd be glad to help



We are here for you!

You've now read everything, but still have unanswered questions or were unable to find a suitable solution?

No problem - our sales hotline is there for you from Monday to Friday and glad to help you with all matters related to the purchase of TECALEMIT products. You can also simply send an email to one of our sales staff or directly to export@tecalemit.de - We will get back to you as soon as possible.

You already have a TECALEMIT product and require a replacement part or have questions regarding its operation?

If so, please call our service hotline. Colleagues who have been with us for years will be glad to help you - not staff from an outsourced service center!

Thomas Schmid

Export Sales Manager thomas.schmid@tecalemit.de Sales

Sales Hotline +49 461 8696-193

Mon. - Thu. 8 am - 5 pm 8 am - 3 pm

export@tecalemit.de

Service

Service Hotline

+49 1805 900-301

Mon. - Thu. 8 am - 5 pm 8 am - 3 pm

service@tecalemit.de

Callback service:

www.tecalemit.de/en/contact

Our team for the European market!

We are here to support you!



Export Sales Manager thomas.schmid@tecalemit.de



Export Sales clemens.thomsen@tecalemit.de



Export Sales virginie.schumacher@tecalemit.de



Export Sales swetlana.wriedt@tecalemit.de



Moritz Martense

Project Engineer moritz.martensen@tecalemit.de

GO WITH THE FLOW.



TECALEMIT GmbH & Co. KG Munketoft 42 24937 Flensburg Germany

export@tecalemit.de www.tecalemit.de Tel. +49 461 8696-126 Fax +49 461 8696-166 Follow us on our social channels:

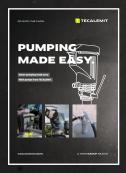




If prices are indicated, they are subject to change, ex works, without packaging and transport insurance, and do not include the sales tax/VAT applicable upon delivery. Our terms and conditions for shipping and payment apply. Reproduction, whether in whole or in part, is prohibited. We reserve the right to make technical changes to catalog articles and changes to product ranges. We shall not be held liable for printing errors and faults.

A HORN**GROUP** BRAND

Have you viewed our other catalogues?



















Waste



AdBlue®









