





# LOGmaster smarter depot control



## 1 - LOGmaster

## PROFLEET

## concept

LOGmaster is a platform for all depot equipment

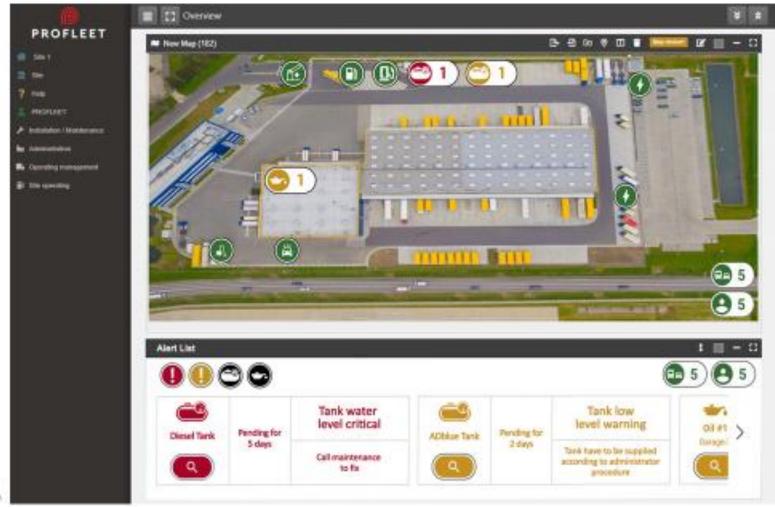
- One tool for follow-up of events & alarms
- One identifier for various applications
- One database to manage
- One software for reports and analysis
- → Improve daily efficiency, reduce time loss



## 2 - LOGmaster

## PROFLEET

## dashboard



#### Visual dashboard for monitoring

- Embedded in the web interface
- Overview map with status alerts
- Alert pane with short descriptions
- Create map according to needs
- Cover a site / region / country

### Introduction



PUBLIC STATIONS

PRIVATE STATIONS OR DEPOTS

- TSG Fleet is the world's largest provider of Fleet & Fuel Management solutions.

  Our offer consists of four core elements:
- Dispensers
- Systems
- Service
- Project Management





### Introduction



#### RETAIL

123.000 sites and 1000+ customers









Core = selling fuel



**Public stations** 

Open to all User = customer

Selling of fuel





Payment required!

#### COMMERCIAL FLEET

300.000 sites and >10.000 customers













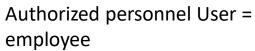


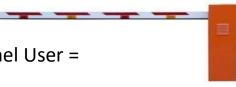
Sasol

**Core = logistics** 

WORLDNET

Private stations







Fuel 'made available'

Only ID required

### Introduction





### **Product Portfolio**

TSG supplies a complete range of solutions to operate a fleet of commercial vehicles; a true one stop shop.





**QFS DiaLOG Fuel** dispensers



**RFID Tags** 



Fuel management system



**Smart Fuel Automatic vehicle** identification



Level gauges



### **DiaLOG**



- DiaLOG is a system used to
  - a) <u>identify vehicles and drivers</u> of a commercial fleet
  - b) <u>control fuel dispensers</u> and peripherals and
  - c) <u>register and report</u> the <u>fuel</u> transactions
- DiaLOG includes <u>management</u> <u>software</u> to <u>monitor and control vehicle consumption</u>
- DiaLOG is a <u>FUEL management system</u>, <u>not</u>
   a <u>FLEET management system</u>
  - Larger customers might import the fuel data in their fleet management system where all cost is tracked (e.g. tyres, service)





### Fleet Dispensers & Fuel Management Systems

#### Serving Commercial Fleet Operators of All Size

- TSG Fleet provides a dedicated set of products and services to the commercial fleet industry
- We supply to all sizes of operation, from small transport companies with a single site to large transport multinationals operating a wide network of sites
- TSG is uniquely positioned to respond to depot manager needs relating to the monitoring of liquids commonly used at depots, such as fuel, AdBlue and oil
- Our partners:

















ATG Console



## DiaLOG: FMS Integrated Pumps – Single / Double nozzle and Dialog Wallbox



QFS Suction Pumps with Integrated DiaLOG

80Lpm or 120Lpm

**FMS WALLBOX** 



Logmaster Terminal







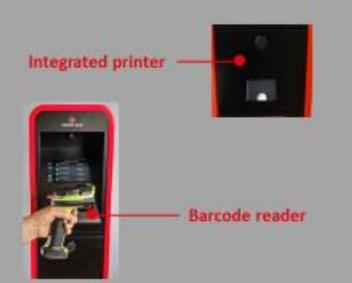
## 3 - LOGmaster



## terminal

#### **High-end terminal**

- Modern, yet solid housing
- Performant hardware inside
- Secure integrated tag reader
- Mid section for extra options





#### Touchscreen

- Interactive display
- Optimum height + tilted
- Rigid, industrial quality
- Content depending type
- On-site communication



#### Available readers

DesFire secured (new), MiFare, Legic, 125 khz,...



## DiaLOG FMS Connected to Tokheim Pumps





We install a DiaLOG FMS WALLBOX

#### We integrate with:

- IFSF Protocol board
- IFSF Comms Board
- IFSF Board in the existing dispenser
  - To get the pulses
  - To get the nozzle contact
  - To switch the motor on/off
- We communicate over RS485
- One set of boards required per pump



## LogMaster FMS Connected to 3<sup>rd</sup> Party Dispenser non Tokheim type





We install a DiaLOG LogMaster FMS

We integrate a "Distribution kit" in the existing dispenser

- To get the pulses from pulsar
- To get the nozzle contact
- To switch the motor on/off
- We communicate over RS485
- One Dia-Dis kit per nozzle required!

RS 485 link





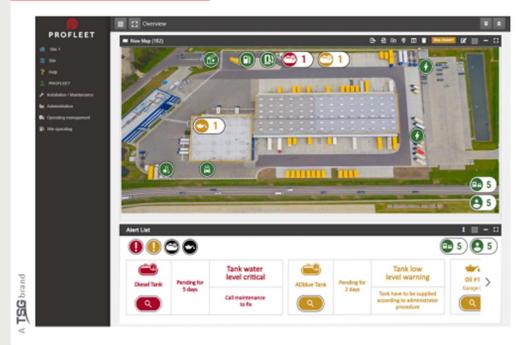


### DiaLOG: Key Functions

PROFLEET
Part of TSG

- Vehicle and driver control
- Tag for vehicle identification
- Pin code for driver identification
- Scanner option for vehicle license disk
- Operator tag/pin identification
- AVI Smart Fuel Passive Ring tag identification
- Fuel consumption tracking reports
- Stock management reports
- Level gauge connection / reports
- Kilometers + hours counting capture
- Automatic reporting to office
- E-mail alerts
- Export of reports and data
- Terminal messages
- Period or geographical limits
- Quotas
- Import external transaction
- Preventative maintenance

## 2 - LOGmaster dashboard



## PROFLEET

#### Visual dashboard for monitoring

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## SITE EQUIPMENT ARCHITECTURE



Cleaned & verified wetstock data can be integrated with client's 3<sup>rd</sup> party interface



DiaLog platform allows the client to view management reporting, manage fuel & equipment remotely.

Wetstock data collected from site sent to the Fairbanks engine for analysis & client view



M A G L 1 N K 8T

Wireless connection



DiaLog FMS wallbox will be linked to the Q230 pumps Or use Q110/210 Dialog Integrated FMS Pumps and will retrieve every transaction + ATG data.

Progauge ATG will read tank stock levels, ATG alarms, water & tank temps every 30 secs.

## 5 - LOGmaster system

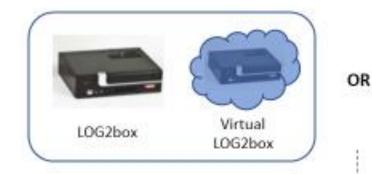


## multi-site



Access to central database through webbrowser

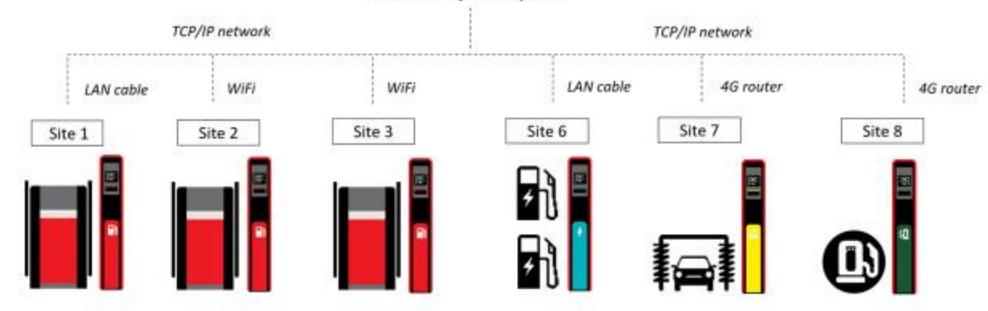
#### INSIDE COMPANY NETWORK



#### OUTSIDE COMPANY NETWORK



#### **Automatic replication process**



## DiaLOG: Pump Authorization OPTION 1: Using RFID Tags or Scanner options

OPTION 2 : Scanner – Vehicle Licences





### DiaLOG: Pump Authorization

OPTION 3: Using SmartFuel for Home Base Sites



- SmartFuel is an automatic Vehicle Identification System (VIS)
- It can recognize a vehicle and/or driver without passing an id
- Optionally, Smart Fuel can also automatically get the mileage of the vehicle without user intervention
- SmartFuel comes as a peripheral to DiaLOG and needs to be connected to DiaLOG to work
- Vehicles not equipped with the SmartFuel system can be identified with RFID tags, the user can also still key in the mileage



### DiaLOG: Pump Authorization

**OPTION 2: Using SmartFuel for Home Base Sites** 



- Eliminates fraud
- Requires "the right amount of the right type of fuel in the right tank"
- Reduces cash and paper handling
- Eliminates fuel theft by station attendants or customers
- Eliminates the problem of stolen cards or coupons and respective losses
- Platform to build customer loyalty by signing long-term contracts



### **Automatic Vehicle Identification**





## Automatic Vehicle Identification Equipment







### Automatic Vehicle Identification: Passive Tags



- Universal 'half-moon' tag
- Generic tag for all applications, one fits all
- Multiple vehicle types catered for
- Secure with break point
- Online Tag Recognition (OTR); simply program the tag serial number in DiaLOG like the standard tag



## Automatic Vehicle Identification: Passive Tags





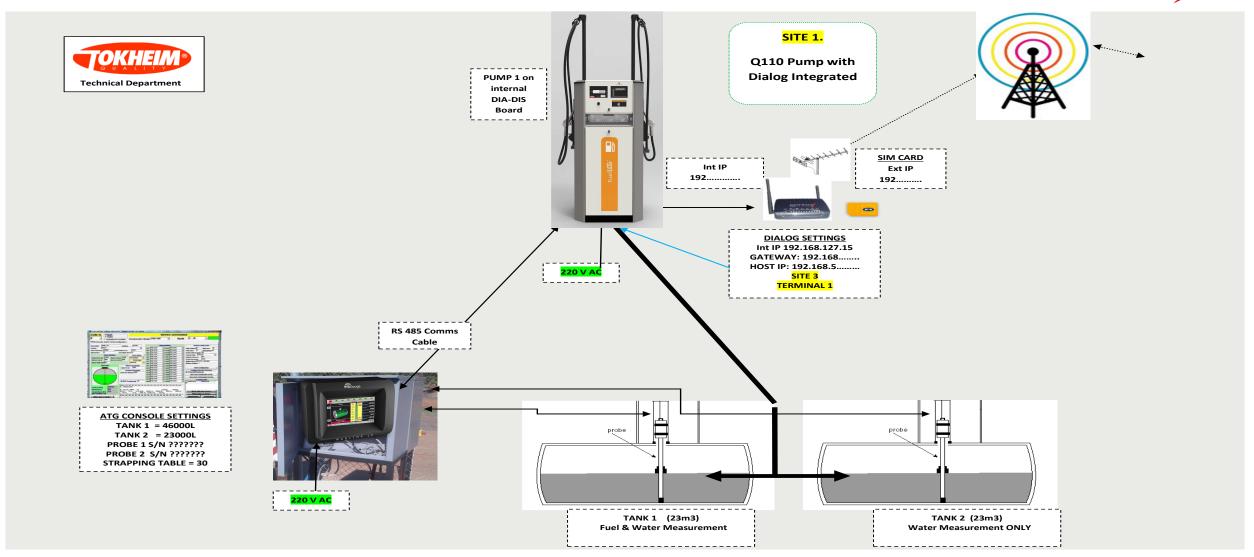




### Typical Installation with QFS DiaLOG Integrated FMS Pump



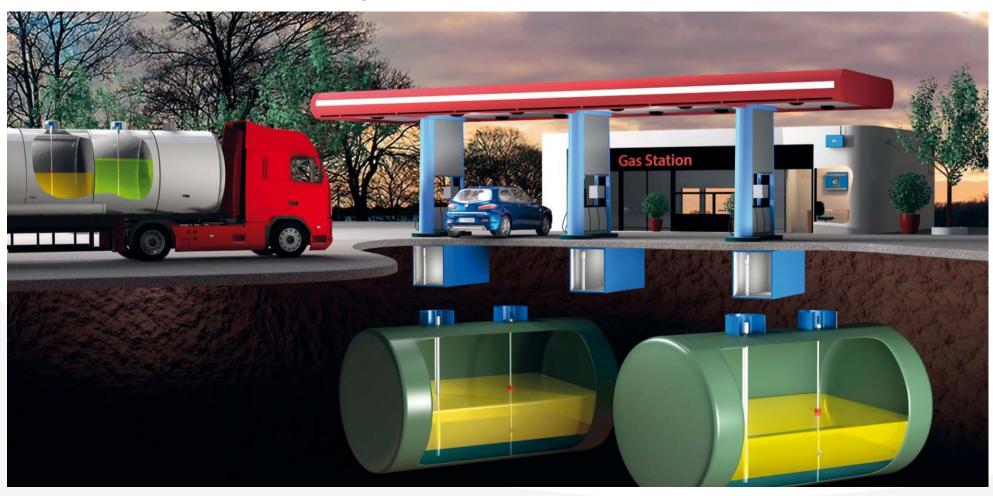
Part of TSG



## Tokheim PRO GAUGE – Wired / Wireless Automatic Tank Gauge



Fuel and Water Level Monitoring





## TSG

#### XMT probe Technical Specification

- Rigid and robust Stainless Steel shaft and enclosure IP68
- It fits in a 2" riser Rugged 7/8" circular connector
- Available from Range 500mm 5000 mm
- Suitable for all fuel types including LPG + AdBlue
- RS 485 serial port communication
- Remote configuration and diagnostic
- Standard measuring accuracy: +/- 0,25 mm.
- Standard resolution: +/- 0,01 mm.
- Temperature accuracy range -20 +70 °C: +/- 0,2 °C.
- Temperature resolution: ± 0,0625 °C.
- Available with Logger Option (Battery Backup)





### Wireless Probe XMT-SI RF

Same spec as XMT-SI but Wireless

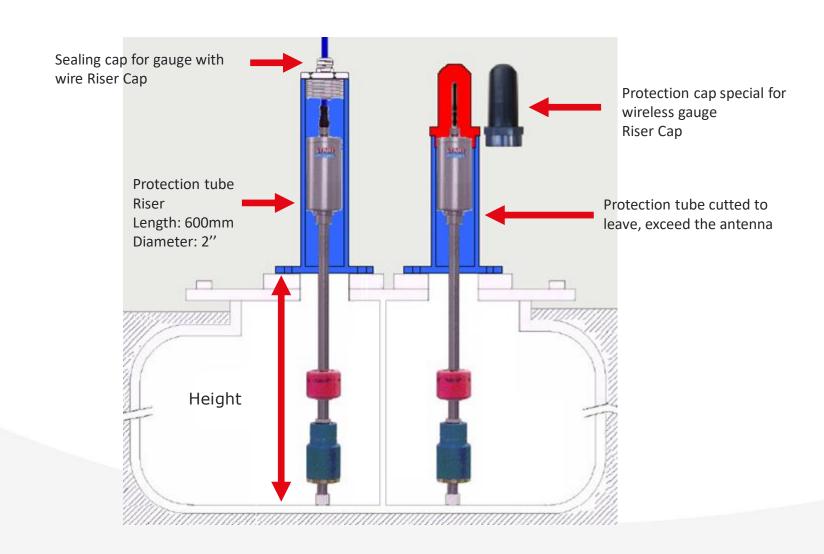
- 169 MHZ technology key factor
- Average battery life 3/5 years
- Long distance transmission also from the underground
- More permeability against obstacles
- Dedicated bandwidth for metering and telemetry
- Free bandwidth not used by consumer technologies







## The Gauges: Wired and Wireless









- Linux Operating System
- Remote Web access and WI-FI enabled
- Colour resistive touch-screen TFT 7" display
- Manages up to 16 tanks, 6 on-off sensors, 4 relays
- Event recording via micro-SD card
- Safe and easy programming via web based interface
- Communication Protocols including: Tokheim, Gilbarco, Dresser Wayne, Retalix, Orpak, DOMS
- Third party probes connection
- Leak detection, deliveries, trends, historical events / alarms recording





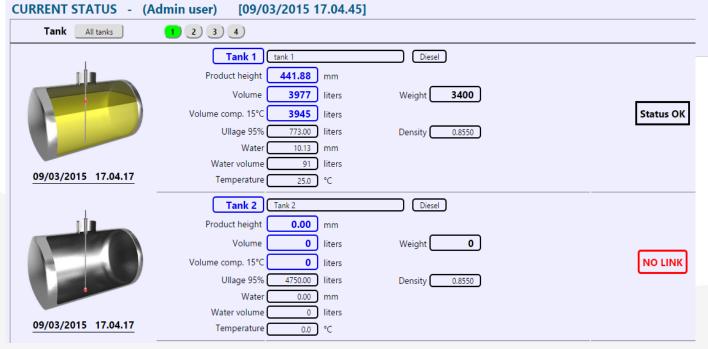
## ProGauge Maglink LX

#### **Direct Connection**

tsg-solutions.com

- Web Server on Board
- No software required
- Remote ATG management and stock confirmation
- Standard internet connection required





## Why ProGauge?

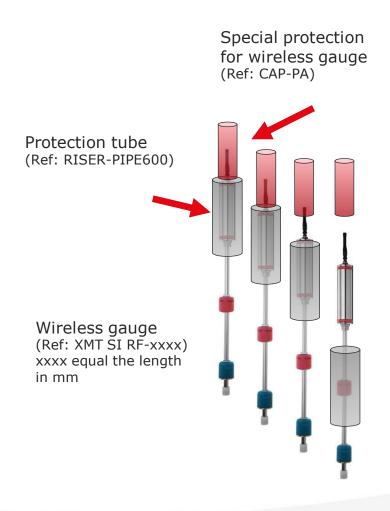


- 1) You will **reduce your stock loss** and **improve your business profitability** 
  - ➤ You will know how much fuel has been really delivered into your tanks
  - You will know how much fuel has been sold through your dispensers
  - ➤ You will know the <u>effect of temperature variation on your stock</u>
  - ➤ You will be able to see the real stock variance and take effective actions
- 2) You will **comply** with **local fiscal** and **environmental** legislations
- 3) You will enjoy all the benefits, without bearing the cost of civil works on your site, with wireless probes
- 4) You will access all your data wherever you want, whenever you need, with our <u>new web-enabled</u> console
- 5) You will improve your *logistics* effectiveness, and reduce your transport costs
  - ➤ You will know how much fuel is in your tanks, in real time
  - ➤ You will be able to move from "pull" to "push" deliveries
  - ➤ You can <u>better plan your deliveries</u> reducing the number of trucks
  - ➤ You will reduce "run-outs" and "haul-backs" due to poor ordering practices
  - ➤ You will <u>eliminate human intervention</u>
- 6) You will <u>reduce your environmental risk</u>, you will detect your leaks before it is too late
  - > You will reduce remediation cost
  - ➤ You will reduce the risk of bad reputation for your Company

## Linking DiaLOG Q110 Pump with Wireless ProGauge Probes and MagLink LX Console

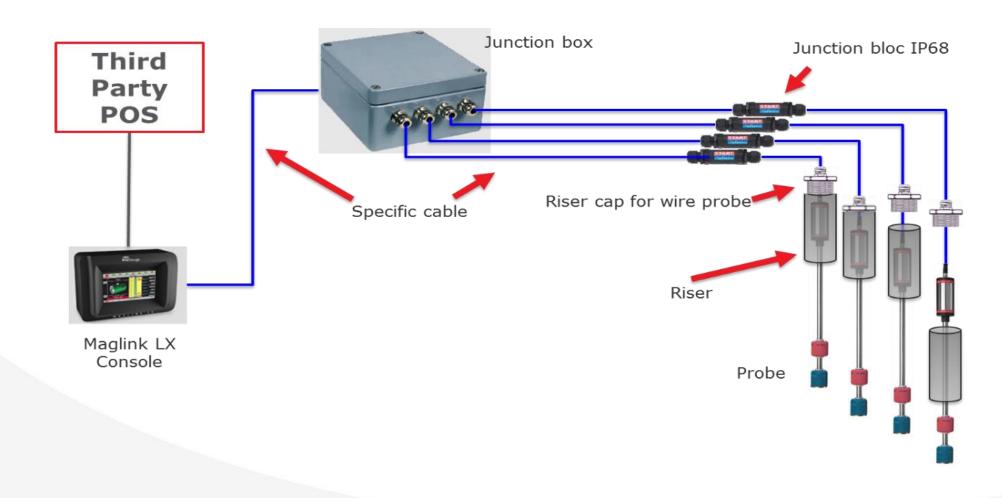






## Linking Wired ProGauge Probes and MagLink LX Console





## **Wireless Probe Installation**









