



Dunraven Systems
Innovative Monitoring Solutions

Product Range

STRATEGIC FOCUS

- driving value

At Dunraven Systems we strive to provide seamless and effortless monitoring solutions for fuel distribution and multi-tank organizations.

Our goal is to deliver innovative monitoring solutions that will drive superior value back to our customers and partners while enhancing their business operations.

Apollo Ultrasonic Local Level Monitors

Apollo Ultrasonic Local Level solutions allow the level inside the storage tank to be clearly and conveniently displayed on a range of easy to read receivers within a limited distance of the tank.

The user friendly devices are simple to install and setup with no specialist tools required.

Dunraven System's current local level product portfolio includes the original Apollo Ultrasonic, Apollo Visual and the revolutionary worlds first Apollo Smart heating energy monitor to name but a few.

Apollo Ultrasonic

- Standard
- Visual
- Smart
- Bunded
- XT
- LD
- Maxfill

Apollo Infinity IoT Remote Monitoring Solutions

Apollo Infinity IoT Remote Tank Monitoring solutions allow fuel distributors and multi-tank organizations to remotely monitor the levels in storage tanks with an unrivalled range of IoT communication technologies to best suit them.

Chose to either take control of storage tanks yourself with **Sigfox, LORA, 2G, 3G, WIFI** or even **HTTP** communication technologies.



RMSDELTA Remote Monitoring Platform

The Delta platform is our newest version of our remote monitoring cloud software.

The multi-tenancy system is completely web based, fully scalable and custom built to work with the complete range of Apollo Infinity IOT monitoring solutions.

www.rmsdelta.com



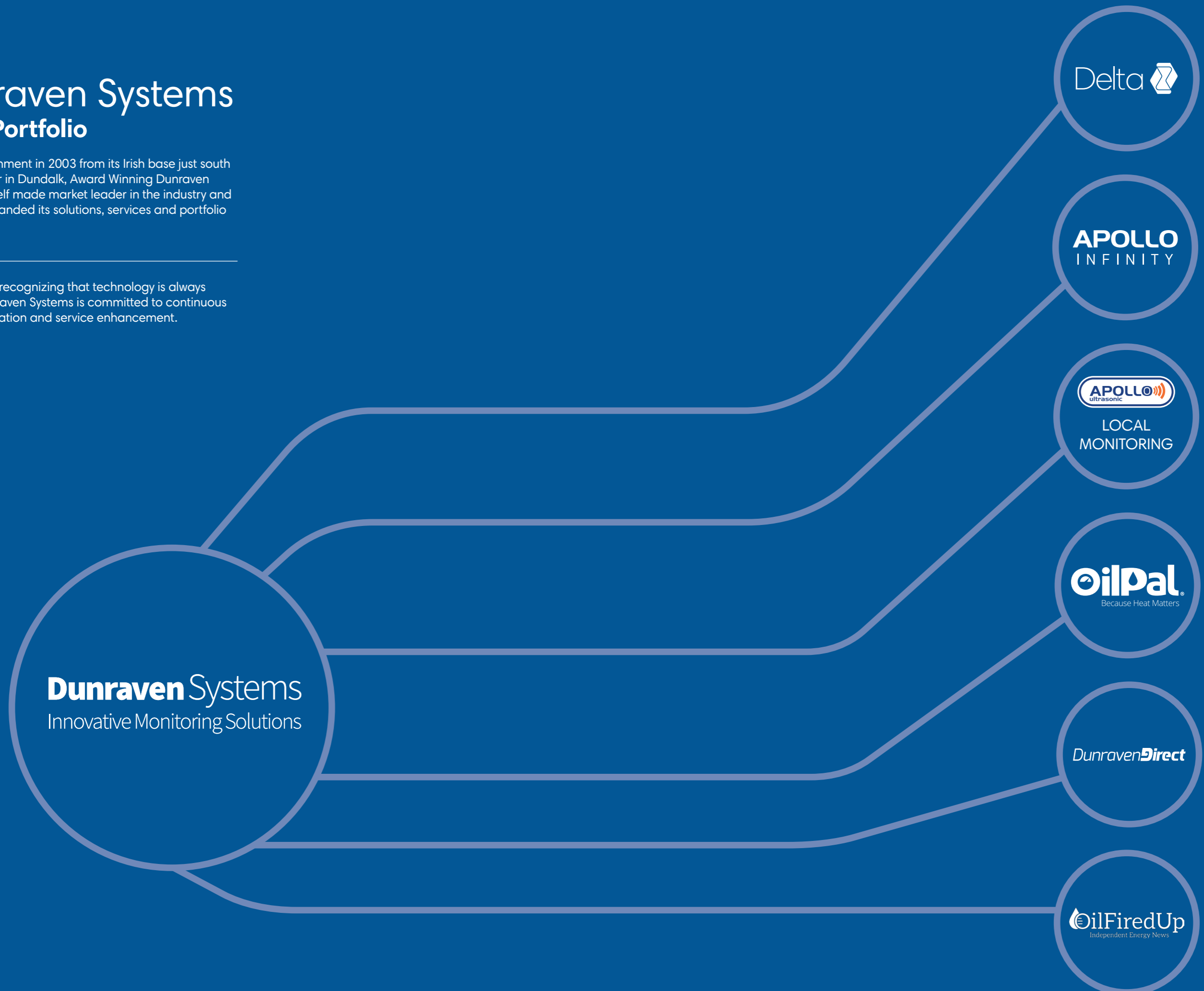
Tens of thousands of tanks are being remotely monitored daily in our software platforms.

Dunraven Systems

- Our Portfolio

Since Establishment in 2003 from its Irish base just south of the boarder in Dundalk, Award Winning Dunraven Systems is a self made market leader in the industry and has vastly expanded its solutions, services and portfolio of operations.

As a business recognizing that technology is always evolving Dunraven Systems is committed to continuous product innovation and service enhancement.



Delta 

APOLLO
INFINITY

APOLLO
ultrasonic 

LOCAL
MONITORING

oilPal
Because Heat Matters

*Dunraven***Direct**

OilFiredUp
Independent Energy News



APOLLO Ultrasonic Standard

The Apollo Standard Ultrasonic is the original Ultrasonic contents gauge and comprises a tank mounted transmitter unit and a plug-in receiver unit.

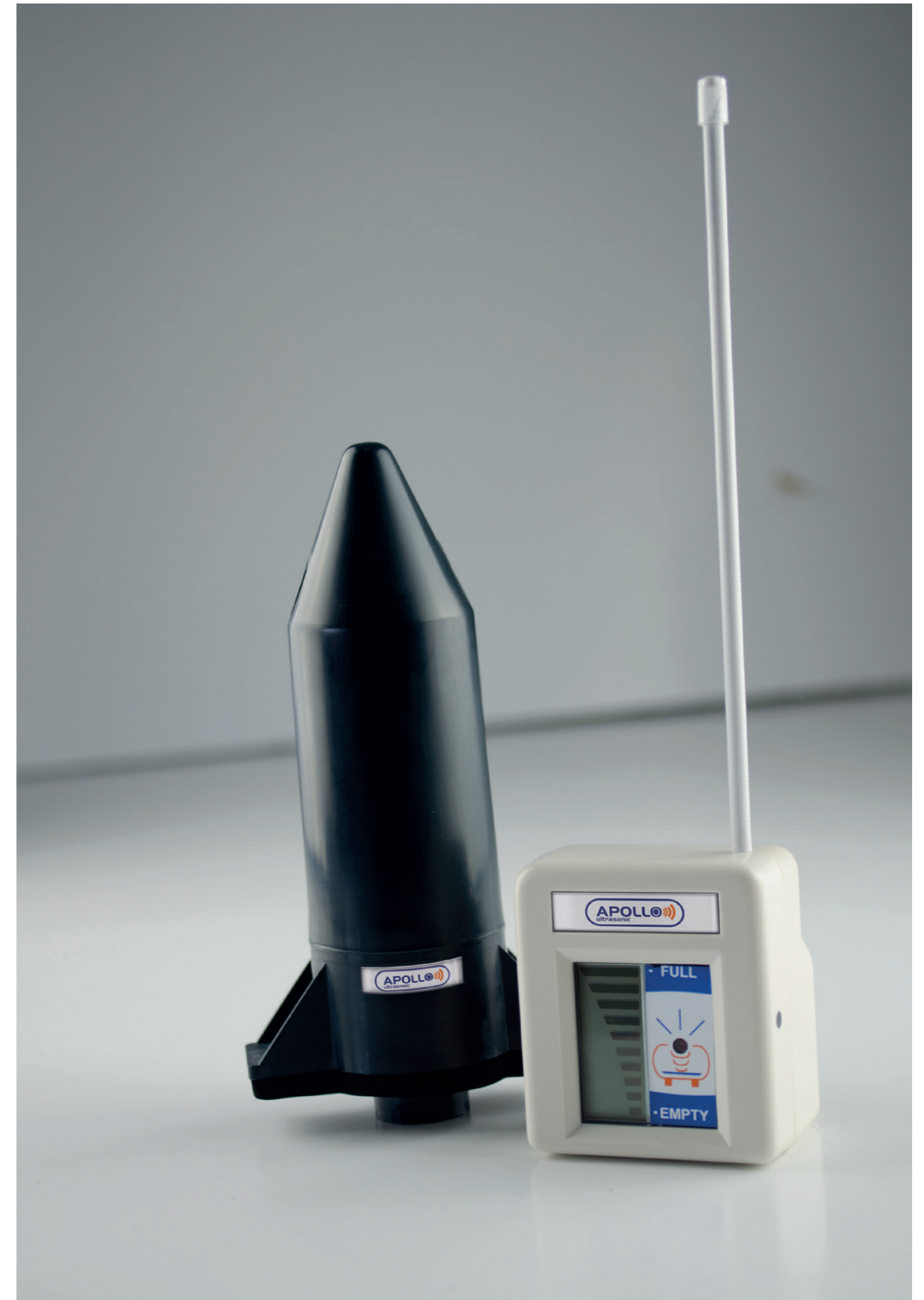
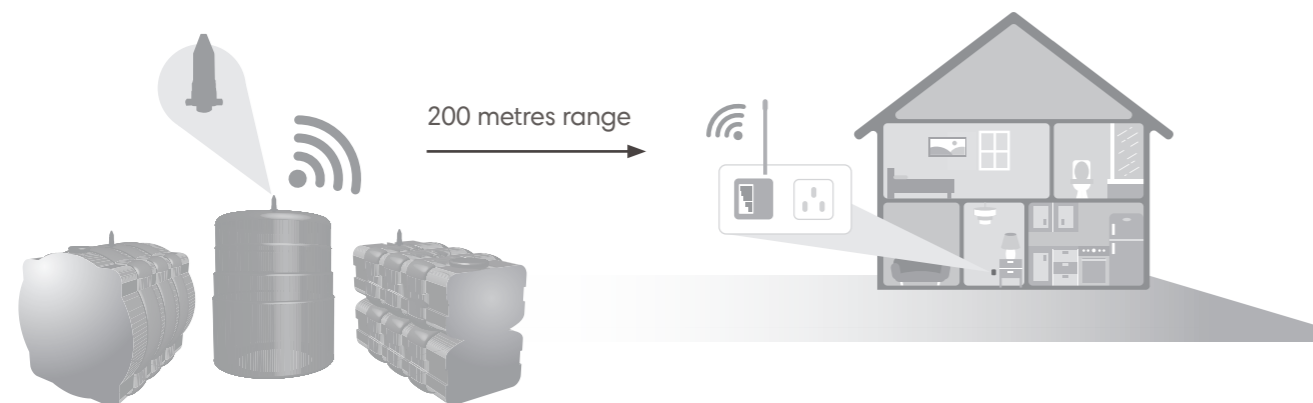
The tank transmitter constantly checks the level in the tank and transmits this to a plug-in receiver unit which displays the level on the easy to read LCD screen.

Benefits

- » Quick & Easy installation with no specialist tools required (fitted in minutes)
- » Supplied with easy to follow step by step instructions and online video
- » Wireless, with up to 200m FM range
- » Constant fuel level displayed in easy to read graduations of useable fuel on a conveniently located LCD display
- » Retro fit to new and existing tanks, steel or plastic, single skinned or banded up to 3m in depth
- » Long life lithium battery in tank transmitter
- » Receiver plug available with various pin settings i.e. 2 pin (eu) & 3 pin UK
- » In-built audible and visual low level alert.

Product Features

- + A tank mounted ultrasonic transmitter unit, compatible with the standard 32mm port fitted to modern plastic fuel storage tanks.
- + Optional multi adaptor ensures compatibility with most steel tanks
- + Plug-in receiver unit with integral antenna
- + Premium quality LCD display, readable from a wide range of angles under varying light conditions.





APOLLO Ultrasonic Visual

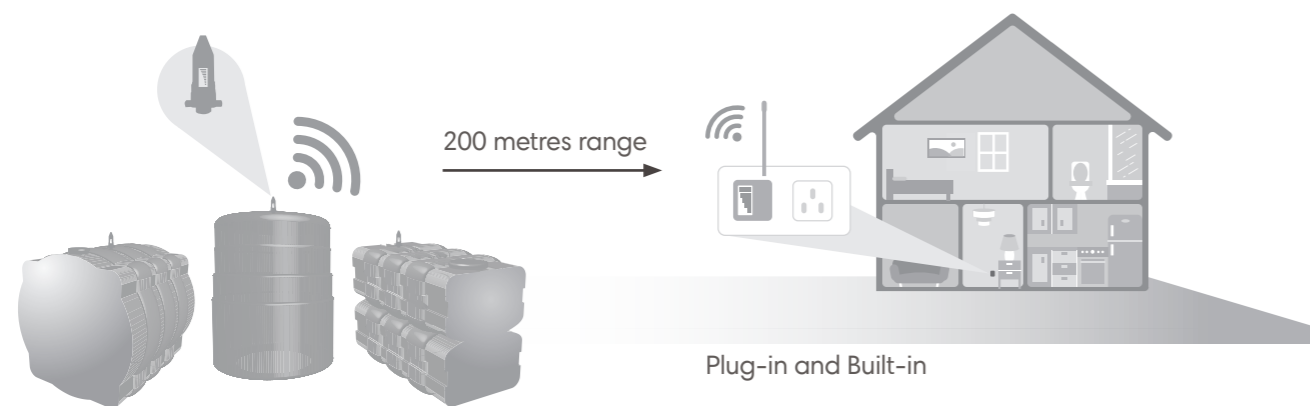
The revolutionary Apollo Visual reports to the fuel level plug in receiver which also has a built-in LCD display on the transmitter incorporating an on tank level.

This allows the fuel level in the tank to be checked and monitored before, during and after filling giving a visual overfill warning at the point of fill helping combat costly over spills. The kit comprises of a tank mounted transmitter unit with a built-in visual LCD display and a plug-in receiver unit.



Benefits

- » Quick & Easy installation with no specialist tools required (fitted in minutes)
- » Easy to follow step by step instructions
- » Visual on tank level
- » Wireless, with up to 200m FM range
- » Constant fuel level displayed in easy to read graduations of useable fuel on a conveniently located LCD display
- » Retro fit to new and existing tanks, steel or plastic, single skinned or banded up to 3m in depth
- » Long life lithium battery in tank transmitter
- » Receiver plug available with various pin settings i.e. 2 pin (eu) & 3 pin UK Compatible with Max Fill, hand held overfill warning device.
- » In-built audible and visual low level alert.





APOLLO Visual Bunded

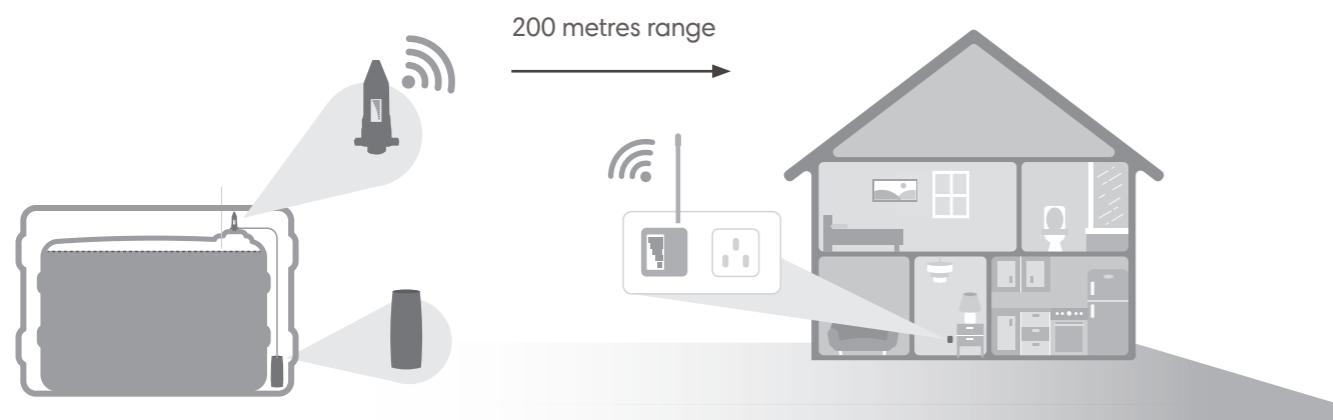
Apollo Visual Bunded is a fuel tank level monitor and bund warning alarm, cleverly integrated into a single, convenient product.

Comprising of a tank mounted transmitter unit with integrated on tank LCD level display, spillage detector and a plug in receiver unit.



Product Features

- » Integrated fuel tank contents gauge with bund warning alarm
- » Quick & Easy installation with no specialist tools required (fitted in minutes)
- » Easy to follow step by step instructions
- » Visual on tank level
- » Wireless, with up to 200m FM range
- » Constant fuel level displayed in easy to read
- » Graduations of useable fuel on a conveniently located LCD display
- » Retro fit to new and existing tanks, steel or plastic, single skinned or bunded up to 3m in depth
- » Long life lithium battery in tank transmitter
- » Receiver plug available with various pin settings i.e. 2 pin (eu) & 3 pin UK
- » Compatible with Max Fill, hand held overfill warning device
- » In-built audible and visual low level alert.





APOLLO Smart Heating Oil Energy Monitor

Apollo Smart allows users to identify the volume of fuel remaining in their tank, monitor costs and consumption along with emissions.

Apollo Smart now incorporates as standard a Fuel Theft Alarm giving users that added peace of mind knowing they will be alerted to any sudden level drops within their tank.



Audible Theft Alarm

Standard Display Outputs

Apollo Smart displays the following on a daily, weekly, monthly and annual basis:

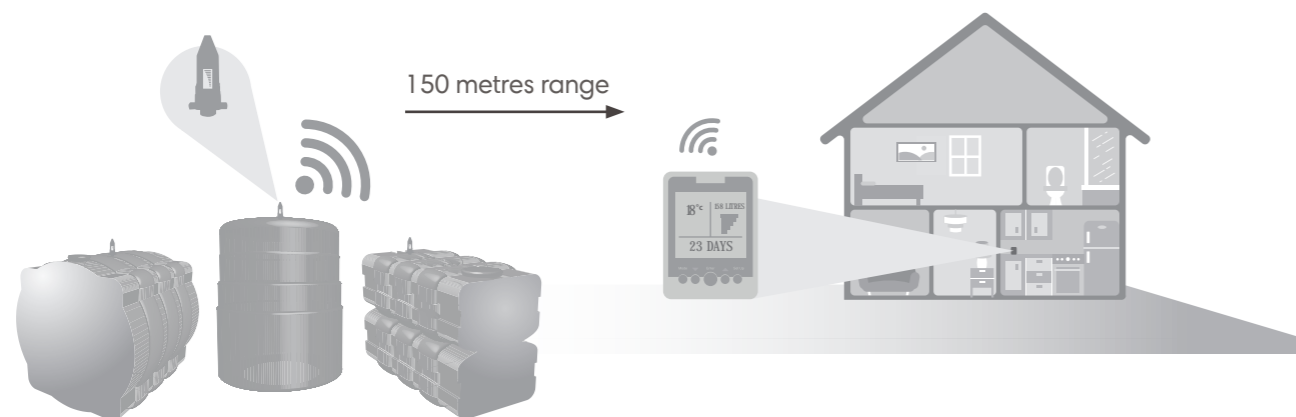
- » Approximate expenditure
- » CO₂ Emissions in kgCO₂
- » Fuel consumption in litres

Additionally, Apollo Smart displays the following information in real time and on demand:

- + Volume of fuel remaining in litres
- + Volume of fuel displayed via bar chart function
- + Number of days supply remaining
- + Internal air temperature in degrees celsius
- + Cold weather warning
- + Low level warning alert both visual and audible
- + Transmitter battery status alert
- + Audible theft alarm

Upgrade Features

- + Bunded switch option



Days to empty

- » Unique 'days to empty' function reduces the risk of running out of fuel.



150m range

- » Receiver unit can be positioned up to 150 metres from the transmitter unit.



Apollo Smart App

- + Optional Apollo Smart App and integral USB connectivity facilitates greater analysis via almost any PC



Benefits

- + Up to 10 times more accurate than comparable measurement systems
- + Can be configured for almost all overground tanks of any shape or model, up to 3m tall, irrespective of manufacturer or material of construction.





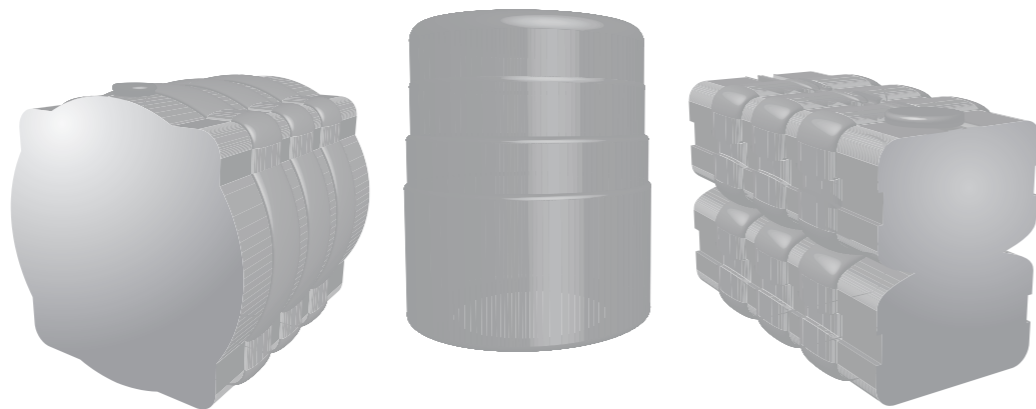
APOLLO Ultrasonic XT

The Apollo Ultrasonic XT fuel tank gauge, is designed for use with fuel tanks installed underground or positioned above safe working height.

Such tanks are notoriously difficult to refuel safely. Apollo XT assists in achieving compliance with Health & Safety requirements by allowing the level of fuel remaining inside such tanks to be quickly, safely and accurately determined.

Features

- » Compatible with the standard 32mm port fitted to modern plastic fuel storage tanks
- » Optional multi adaptor ensures compatibility with most steel tanks
- » Plug-in receiver unit with integral antenna
- » Receiver plug available with various pin settings i.e. 2 pin (eu) & 3 pin UK
- » Premium quality LCD receiver display, readable from a wide range of angles under varying light conditions
- » Inbuilt audible and visual LCD screen
- » Compatible with the Apollo MaxFill handheld tank monitoring unit and remote monitoring.



Low Level Alert

- + Receiver unit incorporates a low level warning alert with audible alarm, reducing the risk of running out.



Cost Effective

- + Cost-effective, affordable and convenient alternative to bespoke, custom made, alternatives.

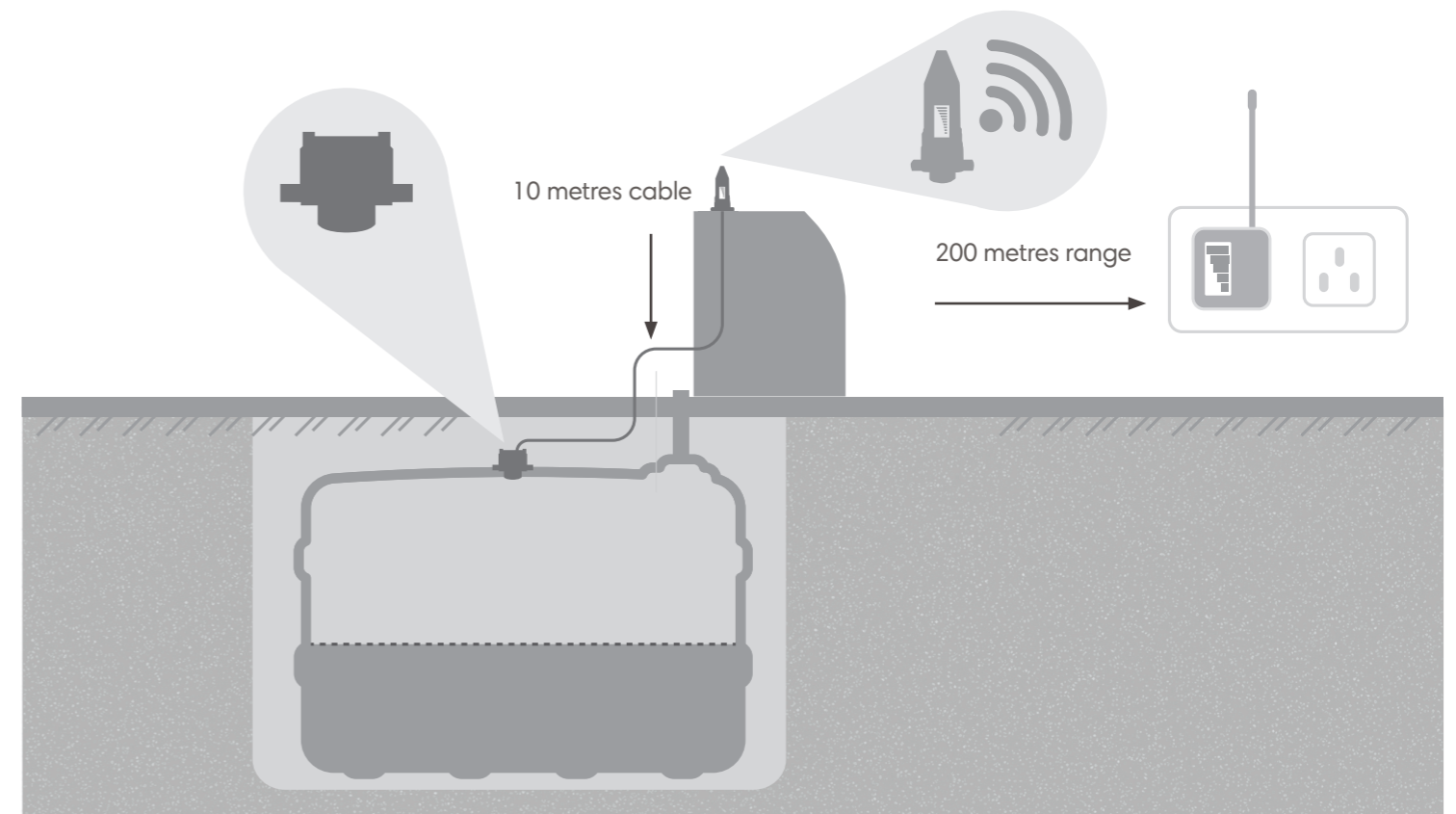


Contactless

- + Contactless measurement technology.

Benefits

- + Ideal for underground steel/storage tanks and tanks positioned above safe working heights
- + Facilitates, cleaner, safer refuelling and reduces the risk of spillages during delivery
- + Easy to use, with the transmitter and receiver units incorporating an easy to read LCD display at point of fill
- + Assists in ensuring compliance with secondary containment requirements
- + No mains wiring or connection required.





APOLLO Maxfill

Apollo MaxFill is the only system of its type currently in-production and is a popular choice with environmentally responsible fuel distributors who wish to reduce the risk of overfills and spillage during delivery.

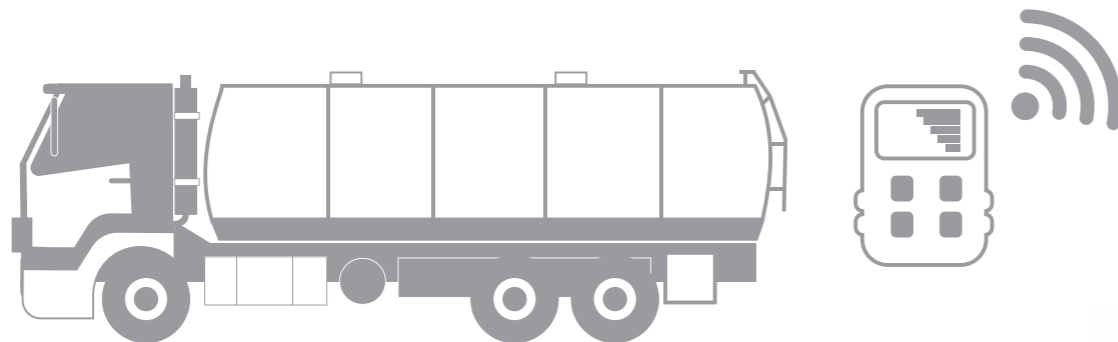


Features

- » Inbuilt, multi-segment LCD display
- » Single handed product display
- » Intuitive product operation
- » Rugged and durable construction
- » Long battery life
- » Inbuilt audible and visual warning alarms
- » Secure FM, wireless transmissions.

Benefits

- + Facilitates, cleaner, safer refuelling and reduces the risk of spillages during delivery
- + Assists in ensuring compliance with secondary containment requirements
- + No mains wiring or connection required
- + Compatible with all Apollo Ultrasonic tank sensors.



Fill Points

- + Ideal for remote and offset fill points.



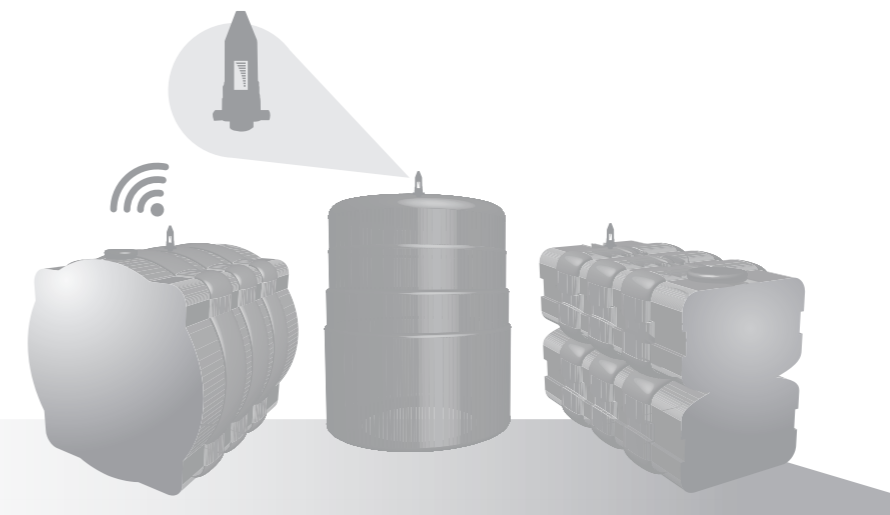
Cost Effective

- + Cost-effective, affordable and convenient alternative to bespoke, custom made, alternatives.



Contactless

- + Contactless analysis technology and the absence of a direct connection to the fuel supply line eliminates the risk of spills & leaks.





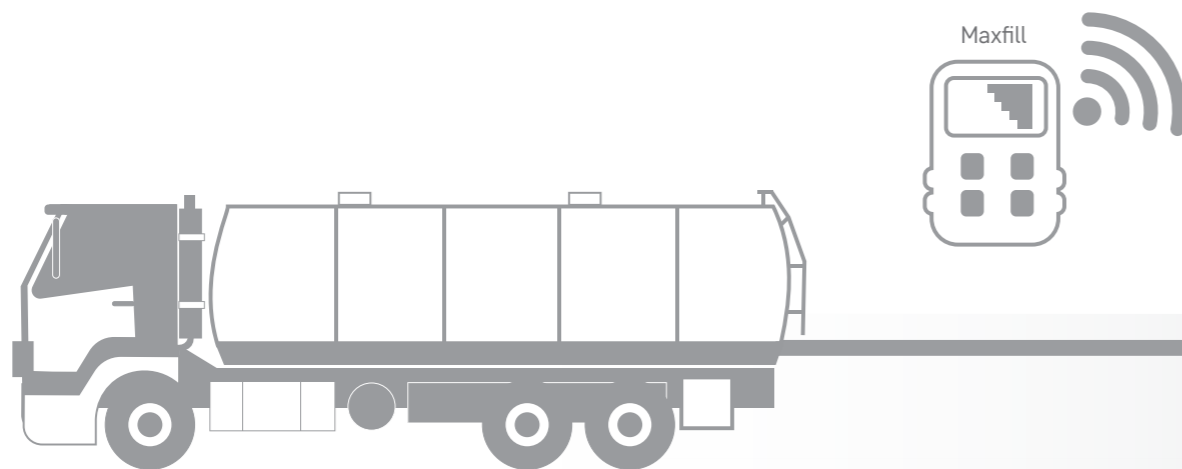
APOLLO LD Remote

The Apollo LD Remote satisfies the requirement to measure and safely fill tanks located remotely from their refuelling point.

The Apollo LD Remote's transmitter unit not only relays liquid level data to a standard Apollo plug-in receiver, but also enables delivery personnel to safely monitor refuelling from the fill point, via the Apollo Maxfill Handheld Unit.

Features

- » Compatible with the standard 32mm port fitted to modern plastic fuel storage tanks
- » Optional multi adaptor ensures compatibility with most steel tanks
- » Wireless, tank top, FM transmitter unit
- » Receiver plug available with various pin settings i.e. 2 pin (eu) & 3 pin UK
- » Available with cable lengths up to 60m
- » Plug in receiver unit with integral antenna
- » Transmitter is powered by a lithium battery with a life expectancy of up to 7-10 years
- » Premium quality LCD receiver display, readable from a wide range of angles under varying light conditions
- » Activation point adjacent to the fill point
- » 10 - 60m cable.



Low Level Alert

- + Receiver unit's premium quality, on-screen LCD display, incorporates a low level warning alert with audible alarm, reducing the risk of running out of fuel.



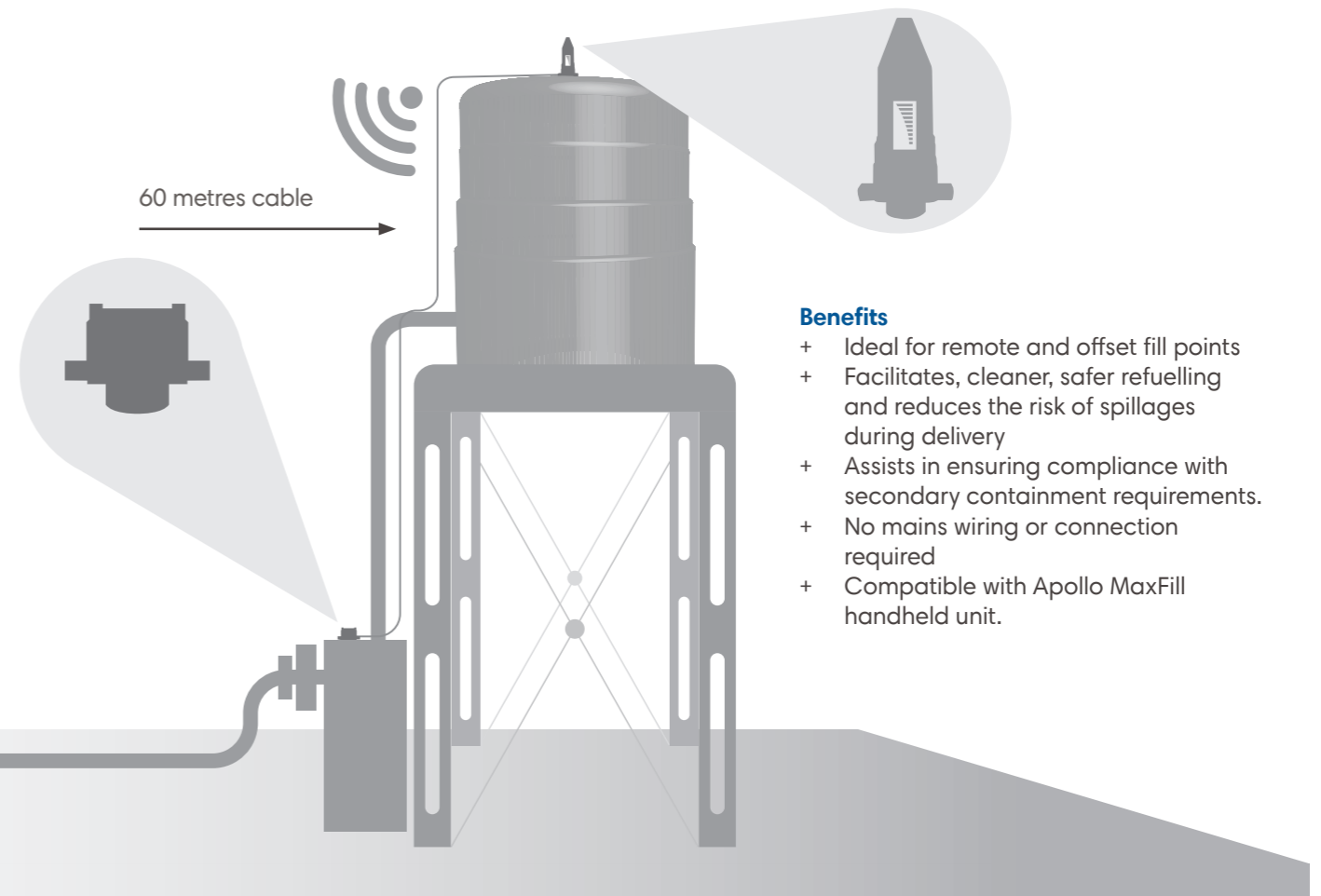
Cost Effective

- + Cost-effective, affordable and convenient alternative to bespoke, custom made, alternatives.



Contactless

- + Contactless analysis technology and the absence of a direct connection to the fuel supply line eliminates the risk of spills & leaks.



Benefits

- + Ideal for remote and offset fill points
- + Facilitates, cleaner, safer refuelling and reduces the risk of spillages during delivery
- + Assists in ensuring compliance with secondary containment requirements.
- + No mains wiring or connection required
- + Compatible with Apollo MaxFill handheld unit.

APOLLO INFINITY

IoT Remote Level

Monitoring Technologies

APOLLO
INFINITY

Delta 



APOLLO Infinity SigFox Ultrasonic Level Monitor

Latest offering from Dunraven Systems the Apollo Infinity Sigfox Ready device avails of the low cost, low power Sigfox IoT network.



Device Benefits

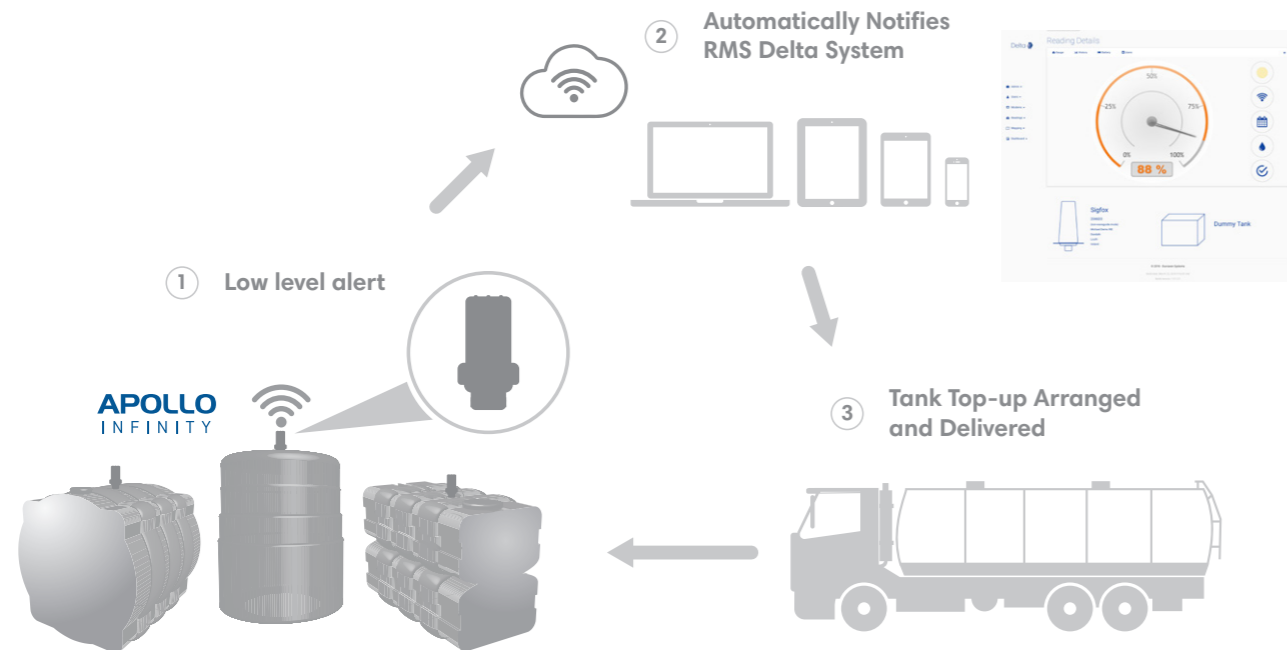
- » 4m in height monitoring Limit
- » Long Battery > 5 years
- » Quick & Easy installation
- » Class 0u Sigfox certified
- » Changeable Call Schedules
- » Avails of state of the art ultrasonic technology
- » 25 km RF distance
- » Web app set up

Connectivity

- Provided with global connectivity
- Sigfox Ready - available in various RCZ Zones

Optional

- Screw base connector
 - » 1 ¼", 1 ½", or 2" BSP to screw into existing tank connection
 - » Bund switch c/w 3m cable.



IoT Cloud Technology



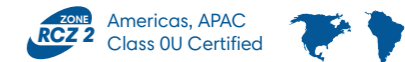
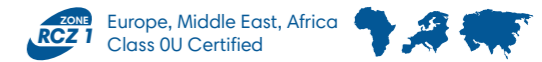
Software Innovation



Adaptable Technology

Applications ideal for monitoring

- | | |
|--|----------------------|
| + Heating fuel (kerosene) | + Fuel fuel |
| + Gas fuel types A2,C1,C2 and D (as defined by BS2869) | + Detergents |
| + Agricultural fuel fuels | + Lubricants |
| + AdBlue | + Waste fuel |
| + Diesel | + Water |
| + Admixtures | + Chemicals |
| + Biodiesel | + Liquid Fertilizers |
| + Bio heating fuel | |





APOLLO Infinity 3G Ultrasonic Level Monitor

Apollo Infinity 3G ultrasonic level monitor avails of the telecoms networks low cost 3G communication channels.



Device Benefits

- » 4m in Height Monitoring Limit
- » Long Battery Life
- » Quick & Easy Installation
- » CE & ROHS Compliant
- » Remote configuration
- » Includes Reactive Ultrasonic's
- » FCC & PTCRB Certified

Connectivity

- Includes Global Connectivity

Optional

- Screw base connector
- » 1 ¼ 1 ½ & 2 inch threads
 - » GPS Supported
 - » SMS Fallback.



IoT Cloud Technology



Software Innovation



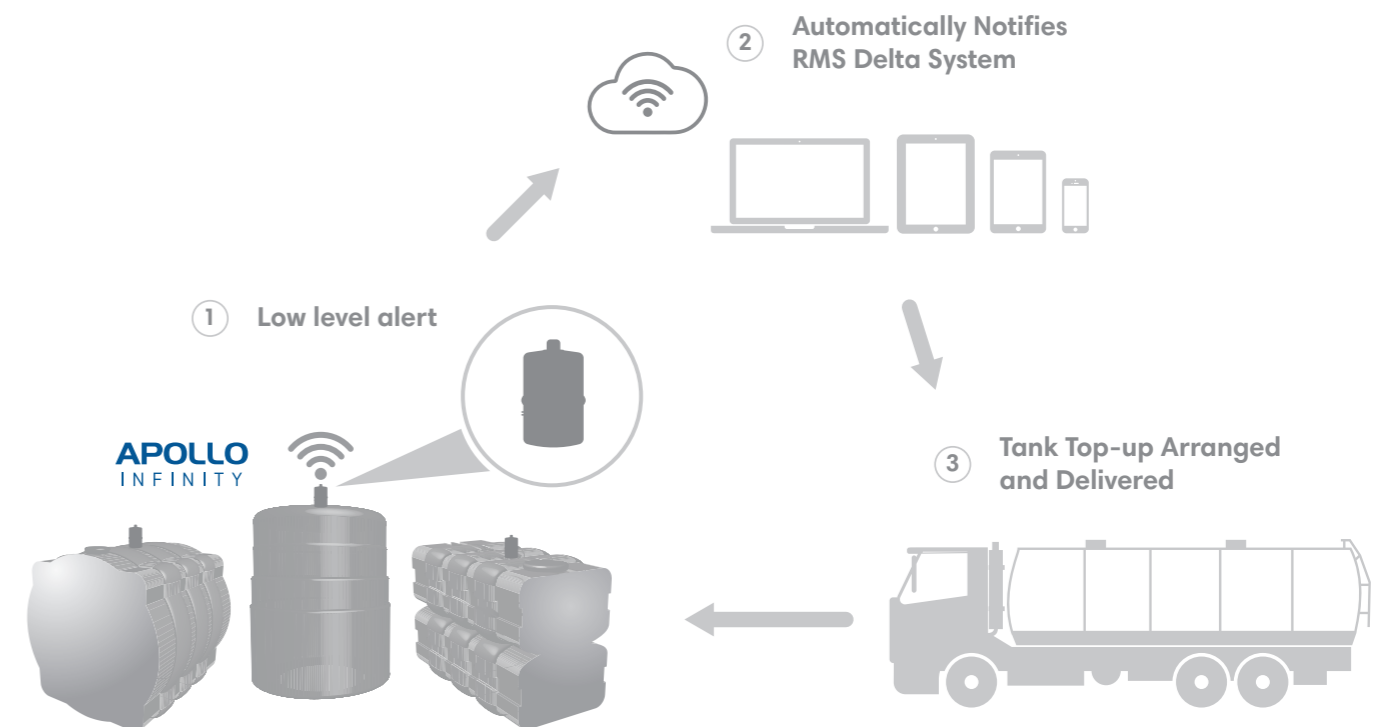
Adaptable Technology

Applications ideal for monitoring

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| + Heating fuel (kerosene) | + Fuel fuel |
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| + AdBlue | + Waste fuel |
| + Diesel | + Water |
| + Admixtures | + Chemicals |
| + Biodiesel | + Liquid Fertilizers |
| + Bio heating fuel | |



Global Connectivity





OILPAL
FOR MORE INFORMATION
www.oilpal.com

OilPal allows heating fuel users to take control of their fuel tank. On any web enabled device, OilPal will simply show you the approximate volume of heating fuel remaining and estimated days until empty.

Oilpal gives users peace of mind that there is a sufficient supply and won't go cold on those long winters nights.

Benefits

- Current Fuel Remaining in Litres
- Current Fuel Remaining as a % of the tank
- Automatic Fuel level Warnings
- Days to empty
- Smart Phone/Tablet/PC Friendly
- Automatic Fuel Monitoring on the go
- Clean, Modern & easy to use
- Avails of tried and tested 100% reliable technologies

Connectivity

- WIFI & RJ45



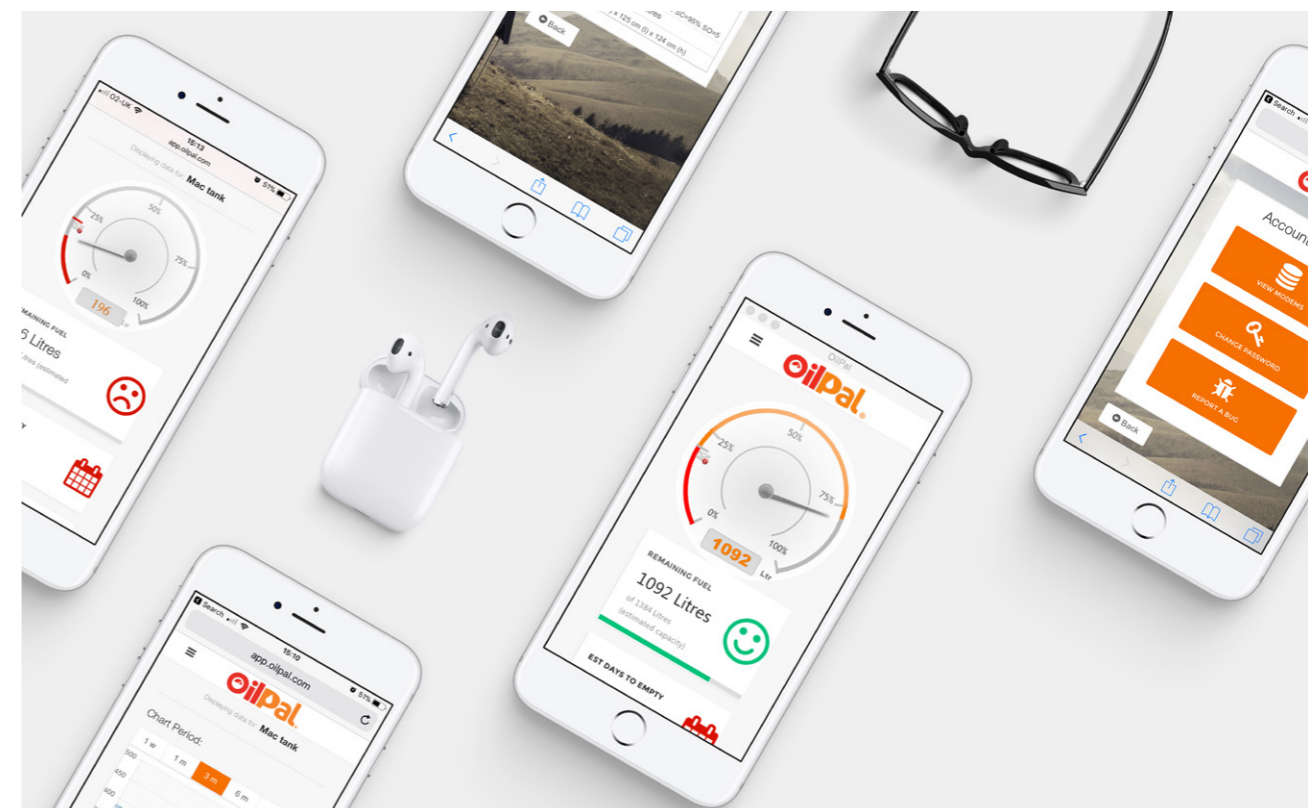
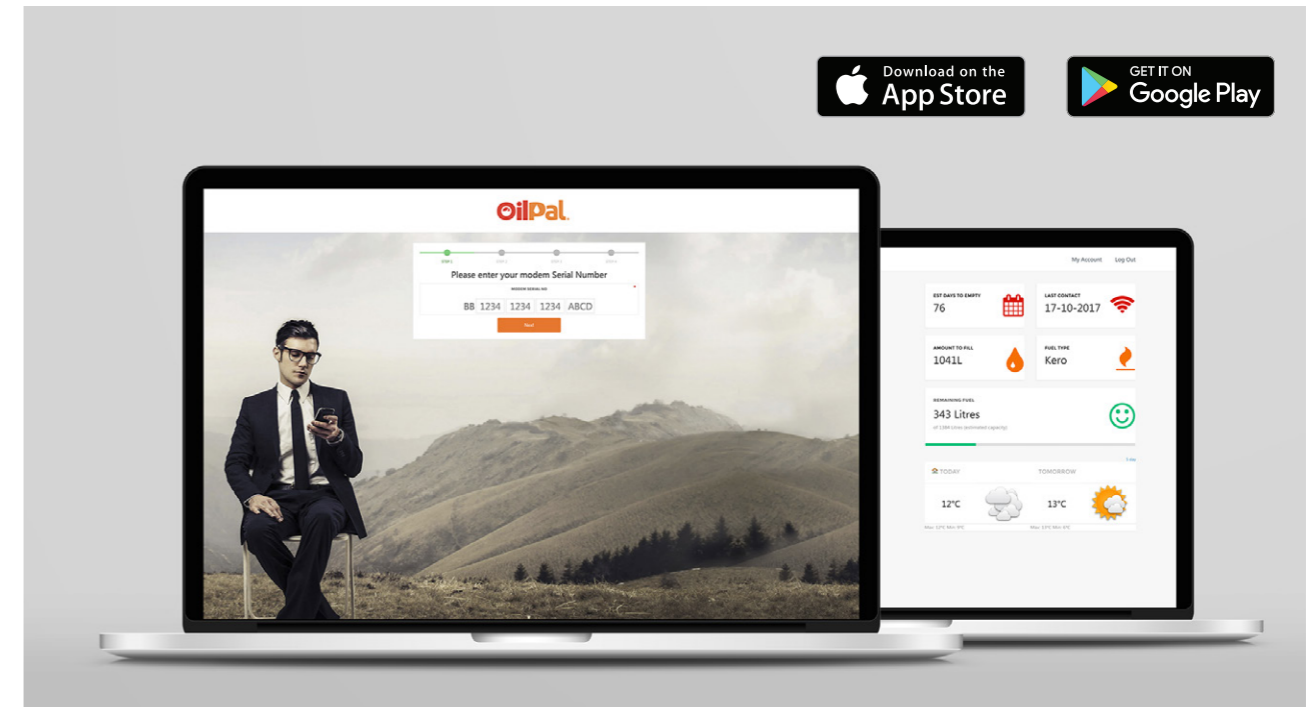
IoT Cloud Technology



Software Innovation



Adaptable Technology



RMS DELTA

IoT Remote
Monitoring Software



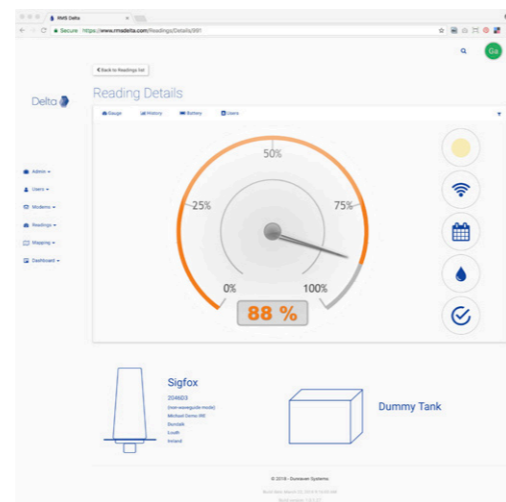
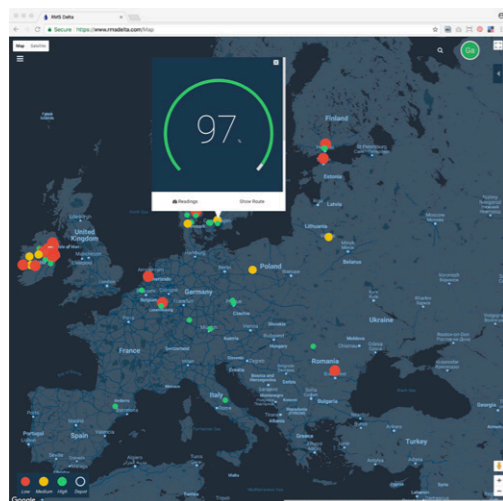
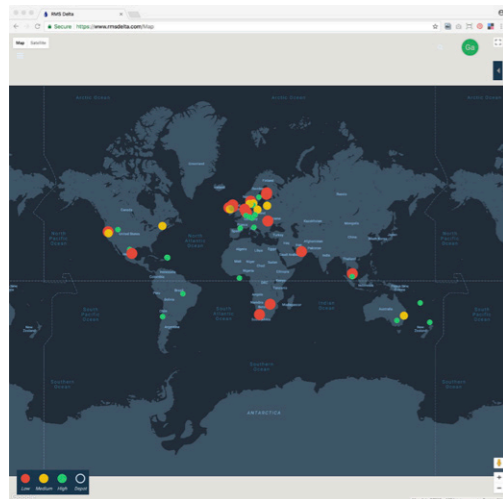
Delta Remote Monitoring Software

Adaptable integrated software system with an unrivalled range of IoT connectivity solutions.

With its IoT innovations, Dunraven Systems has reinvented the storage tank monitoring market. With our IoT monitoring solutions we securely connect IoT sensors from around the globe to our Delta Cloud.

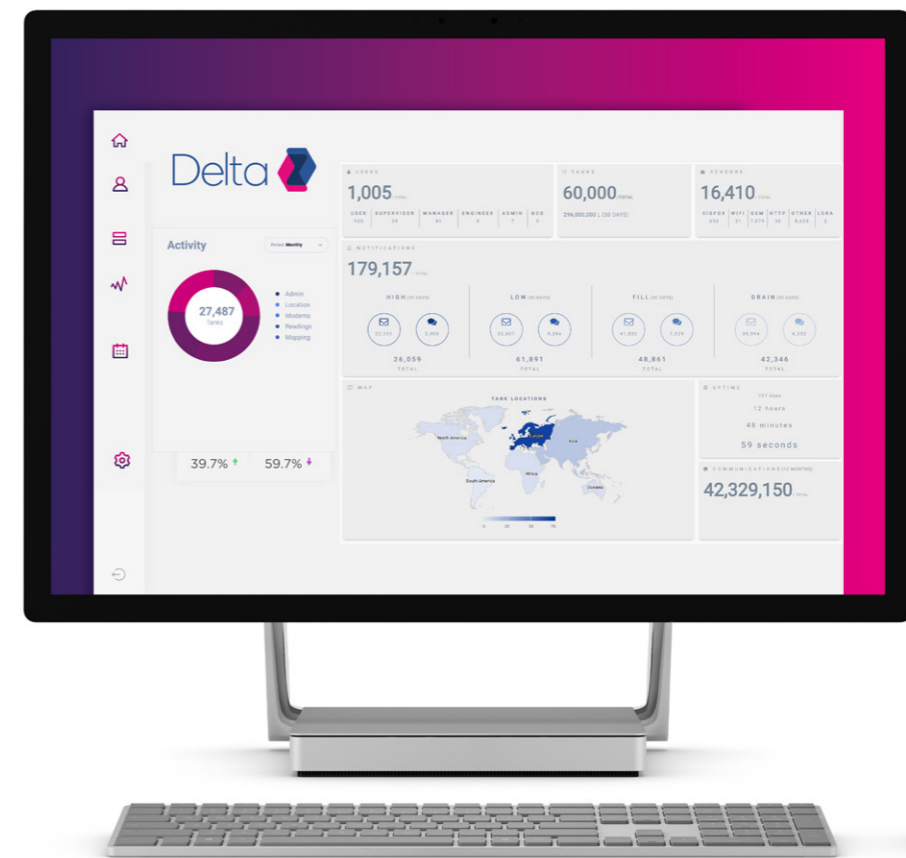
System Benefits

- » State of the art, secure, custom built cloud based multi-tenancy platform
- » Cost effective fully scalable system to meet customers needs
- » Exportable data reports via various methods
- » Offers seamless third party integrations - APIs
- » Mapping and routing features
- » Auto reporting
- » Auto threshold alerts via various communications i.e. sms
- » Responsive system available to access on any device 24/7
- » Disaster recovery with auto back ups for life
- » ISO 27001
- » Bespoke changes
- » Uptime robot notifications



Microsoft Azure

 **Dedicated system support team.**



IoT Cloud Technology

- » Compatible with various IoT communication technologies.



Software Innovation

- » Cost effective fully scalable system.



Adaptable Technology

- » Alternative communications and sensing technologies.



Dunraven Systems
Innovative Monitoring Solutions

APOLLO
INFINITY

Delta 

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