

**CLICK-IN CLICK-OUT MODULAR DESIGN
FLEXIBLE REPORTING AND REAL-TIME DATA:
THE WORLD'S MOST ADVANCED
FUEL MANAGEMENT SYSTEM**



**CLOUD
BASED
TECHNOLOGY**

**NO
ONGOING
COSTS**

**NO
PC SOFTWARE
NEEDED**

SmartFill
GEN 2

**FLUIDMANAGEMENT
TECHNOLOGY**

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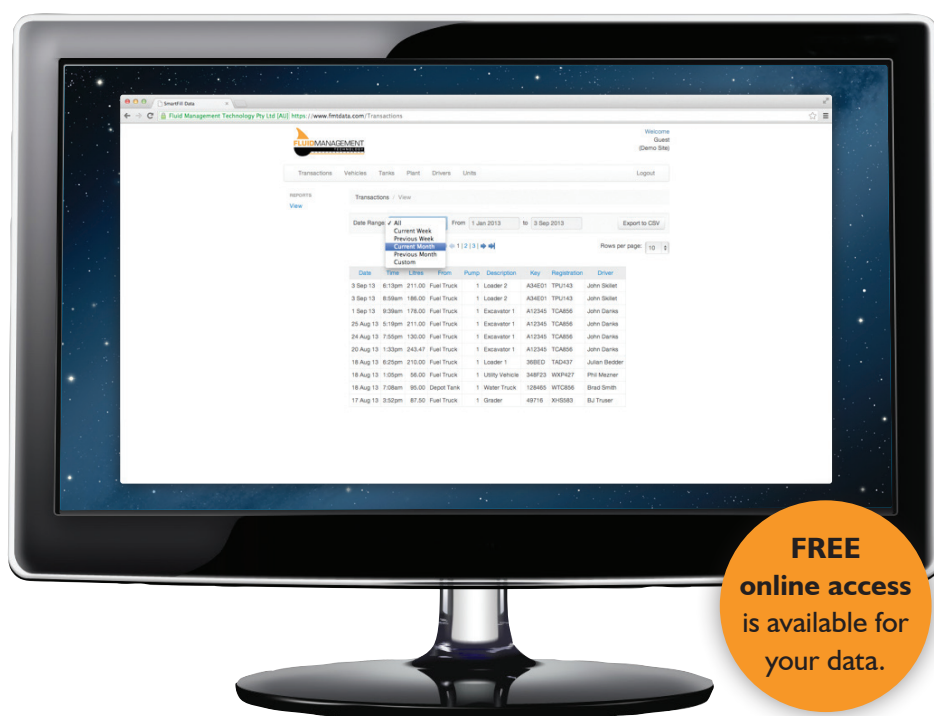
The world's most functional fuel management system

Simple, robust and functional wins in the long run.

Our three design principles keep fuel flowing and ensures that every drop is recorded to make accounting and fuel management easy.

A robust system you can rely on.

Known to outlast the browsers they were originally attached to, our units have survived floods, fires and even being accidentally run over by heavy equipment.



You'll always have the support you need to resolve any issue.

We're just a phone call away

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PROVEN IN THE FIELD

"It's just way superior to anything else on the market."

Response from a survey of installers

"Managing fuel levels is so much easier with SmartFill GEN 2. We can do everything online, without losing any staff time with onsite visits."

SmartFill GEN 2 was clearly well thought out, it ticks all the boxes. We need nothing more."

**Dave Basso, Manager
Delstrat Earthmoving**

SmartFill GEN 2



NETWORKED COMMUNICATIONS – 3G, WIFI, ETHERNET

Networked communications keep your records up-to-date in realtime. Your data is always available and you don't need any special software to access it. USB access on the front of the panel provides access to data if you do not have a communication network.

ELECTRICAL ROBUSTNESS

Designed to deal with unstable power sources, such as generators, truck systems and environments with high levels of electrical noise.

ENHANCED SECURITY

Access to fuel by vehicle and/or driver can be restricted by preselected times (such as 9am to 5pm) and/or volume (such as a maximum of 2,000 litres).

EASY TO USE, EASY TO SET UP

Configuring the unit is menu based, eliminating the need to enter excessively long codes or numbers.

TOUGH ON THE OUTSIDE

An IP66 rated, powder coated steel enclosure ensures continuous operation in all conditions. Tested temperature range -25 to +55C and microparticle proof rubber seals stop dust, insects, moisture and water from entering the unit. Multiple gaskets further enhance protection.

SMART ON THE INSIDE

Easy to service the unit with Click-in and Click-out modules. Each is clearly marked and can only fit in one place. No need for special technical or electrical skills.

SMART ACCESS

Near Field Communications for easy user or vehicle identification, with long lasting proximity cards. You also gain flexibility to gain the data you want, and how you want it. Access can also be provided via PIN, iButton key and VIN (Vehicle Identification Number).

THAT'S SMART!

SmartFill GEN 2 continuously checks the entire system. Back-up power is inside the unit.
You'll never lose data.

SUMMARY OF BENEFITS

- Data is recorded instantly online, with no need for special software (and it's **FREE** to access!)
- Inside, the components are easy to install if required. Click-in and click-out design requires no special technical skills
- Control up to 4 fuel/oil dispensers, all delivering simultaneously
- Records fuel use for up to 2000 vehicles
- Records the past 5000 fuel issues in memory
- Uses secure vehicle keys, and driver PIN or keys to control access to fuel
- Restrict fuel usage by volume per vehicle/driver and/or time
- All data is stored securely in the unit and can be automatically uploaded to a secure website after each transaction
- Multiple communication options available for uploading data to the website: WiFi, 3G and Ethernet
- Large easy to read, colour LCD display
- Can be configured and is continuously monitored remotely via the website
- Modular design allows for rapid installation and repair
- The system can be used as a "preset" delivery system. This is ideal for lube trucks or workshop lube dispensing systems
- Suits just about any fuel bowser or bulk flow-meter
- Housed in a tough, weatherproof enclosure. High quality lock and stainless steel door hinges, for use in all weather conditions outdoors. Enclosure rating is IP66
- Proven reliability around the world in extreme hot, cold, dusty, windy and salty environments
- Extensive professional network of support
- Optional interface to other systems' tank gauging

Optional integrated tank gauging is available with SmartDip
- view tank levels online or with SMS

Refuelling a vehicle



Touch the authorised vehicle ID key, fob or NFC card onto the sensor of the unit

Once authorised, the unit can request the vehicle speed/hourmeter reading and/or job number, which helps with scheduling maintenance

Enhanced Security Options

- SmartFill GEN2 can request a driver PIN, which will allow you to personalise your records
- Vehicle and/or driver access to fuel can be restricted by preselected times (such as 9am to 5pm) and/or volume (such as a maximum of 2,000 litres day).

SmartFill GEN 2 Accessories Overview

NFC Cards and Key Fobs

Easy user or vehicle identification is provided with key fobs, vehicle ID keys or long lasting Near Field Communication proximity cards.



Magnetic Swipe Card Reader

Utilise your existing fuel cards as user ID. Simply swipe to access fuel. Our magnetic card readers are the toughest available, with an IP67 rating, they are dust and water proof.



Reader Wand

Eliminate the trouble of staff losing keys, using keys from other vehicles or taking keys home. A reader wand is attached to the SmartFill unit with the vehicle touch key mounted onto the vehicle. To access fuel the driver simply touches the reader wand onto their vehicle touch key.



Vehicle touch keys get mounted onto the vehicle



The reader wand is attached to the SmartFill unit

Pedestal

Heavy duty steel pedestal for mounting the SmartFill unit on site.



Easy to service SmartFill GEN 2 modules

All modules are clearly marked and only fit in the one place with a Click-in Click-out design.



Pump Control Module



Pump Protocol Modules
Gilbarco / New Zealand
Pump Protocol



Communications Module
(3G or WIFI)



Tank Gauging Modules
SmartDip or TLS/ OPW/
Franklin interface module

A world of applications in the toughest of environments

MINING



Throughout Australia and the world, SmartFill GEN 2 controls and records the hundreds of millions of litres of fuel needed every day to mine and process everything from coal to gold.

MUNICIPALITIES



Even in the most isolated areas, theft is prevented and every drop of fuel used is recorded.

SERVICE VEHICLES



With auto power off and battery isolation, the system has been specifically designed for service truck use.

MARINAS



Specifically designed for the harshest of environmental conditions, SmartFill GEN 2 stands the test of time and tide in Marinas.

CIVIL CONSTRUCTION



Face extreme weather conditions from minus 25 to plus 55 degrees in isolated areas.

TRANSPORT



All data is captured online in real time for easy accounting and control of large to small fleets.

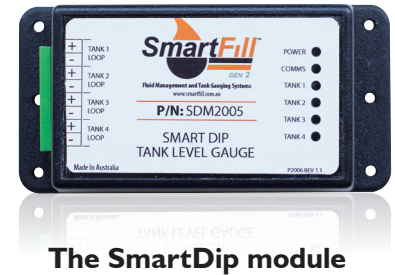
SmartDip Tank Gauging with online reporting and SMS

A simple foolproof design, with the affordability to match

When you combine SmartDip with SmartFill GEN 2, you have a complete fuel management and reporting system in just one unit, to report, record, measure and alert about fuel use and levels.

The SmartDip system is a simple and reliable design for people who require a functionally accurate system for re-ordering and basic stock control.

SmartDip monitors up to four tanks. It is suitable for most non-flammable liquids such as diesel, with densities ranging from 0.500 to 60.



The SmartDip module

Ease of mind with an alarm system that is set for your needs

SmartDip has a low/high level alarm fitted and the alarm levels for each tank can be set by the user. Densities can be changed by the user in case of density or product type changes.

How do I view the tank levels?

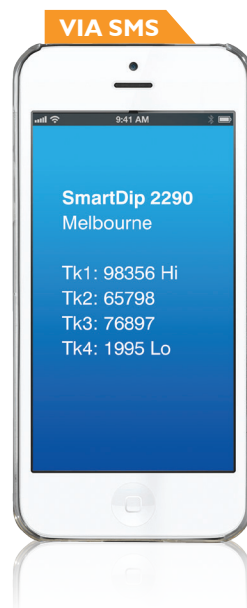
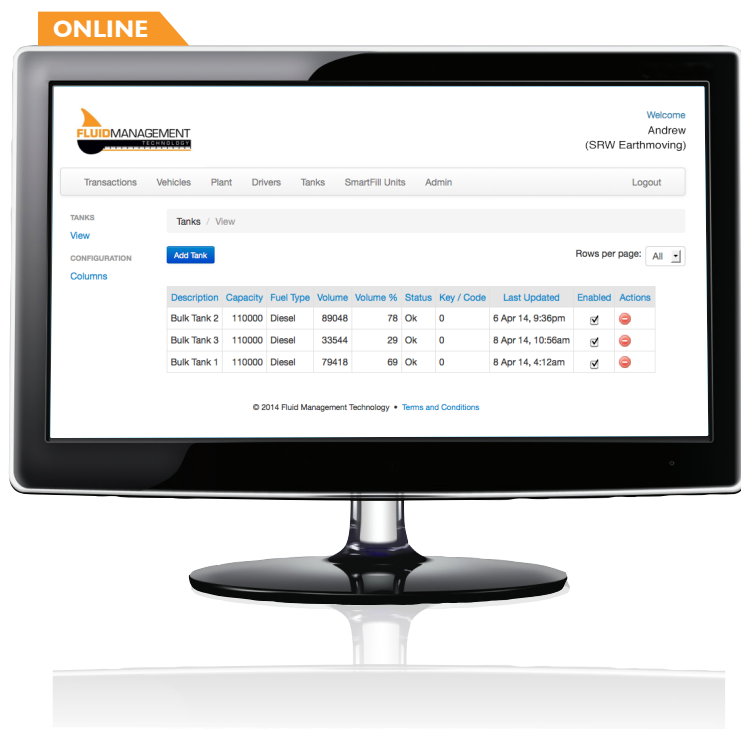
1. The levels are continuously displayed on a dedicated SmartDip installation or can be displayed as required on a combined SmartFill display, thus eliminating the need to climb ladders to access readings
2. If the unit is connected to the internet, tank levels can be accessed anytime on your secure website
3. Just send SmartDip a blank SMS from your mobile phone and it will reply with an SMS showing the tank levels. Tank levels can also be sent to your mobile phone automatically at a preset time of day

As with all of our products, the system is simple to install, easy to use and keeps working year in and year out.

ATG interface

SmartFill GEN2 can also easily integrate with automatic tank gauging systems that support the Veeder-Root TLS serial protocol or any other 4-20mA or RS232 output.

SmartDip monitors up to four tanks. Tank levels can be viewed on a unit next to the tank, accessed online in real time and can also be sent via SMS on demand or at a preset time of day.



SMARTDIP TECHNICAL DATA


Standalone or integrated with SmartFill

DATA TRANSFER	USB or direct to website via 3G, WiFi or Ethernet
POWER	240VAC or 12-24VDC
FLUID TYPES	Non flammable liquids e.g. Diesel
SENSOR TECHNOLOGY	4-20mA Pressure Sensor
MAXIMUM TANK HEIGHT	10.9m
ACCURACY	+/- 1% of span
NUMBER OF TANKS PER UNIT	4

*3G version required for SMS functionality

MODEL	NUMBER OF PUMPS	PUMP CONTROL	PULSER INPUTS (REED OR HALL EFFECT)	NOZZLE SWITCH INPUTS	NMI APPROVED	POWER
SF2-A-G-AC-N-Y	1 - 8	Gilbarco Comms	N/A		Yes	120-240 VAC
SF2-A-G-AC-S-Y	1 - 8	Gilbarco Comms	N/A		No	120-240 VAC
SF2-A-NZ-AC-N-Y	1 - 8	NZ Pump Protocol	N/A		Yes	120-240 VAC
SF2-A-NZ-AC-S-Y	1 - 8	NZ Pump Protocol	N/A		No	120-240 VAC
SF2-A-X-AC-N-Y	1 - 2	AC Switched 240VAC, 10A max	1 - 2	1 - 2	Yes	120-240 VAC
SF2-B-X-AC-N-Y	3 - 4	AC Switched 240VAC, 10A max	3 - 4	3 - 4	Yes	120-240 VAC
SF2-A-X-AC-S-Y	1 - 2	AC Switched 240VAC, 10A max	1 - 2	1 - 2	No	120-240 VAC
SF2-B-X-AC-S-Y	3 - 4	AC Switched 240VAC, 10A max	3 - 4	3 - 4	No	120-240 VAC
SF2-A-X-DC-N-Y	1 - 2	DC Switched 24VDC, 5A max	1 - 2	1 - 2	Yes	9 - 36VDC
SF2-B-X-DC-N-Y	3 - 4	DC Switched 24VDC, 5A max	3 - 4	3 - 4	Yes	9 - 36VDC
SF2-A-X-DC-S-Y	1 - 2	DC Switched 24VDC, 5A max	1 - 2	1 - 2	No	9 - 36VDC
SF2-B-X-DC-S-Y	3 - 4	DC Switched 24VDC, 5A max	3 - 4	3 - 4	No	9 - 36VDC

Y = (C = Cellular W = WiFi E = Ethernet) X = Number of control outputs N = NMI Approved S = Non NMI Approved

IDENTIFICATION & PEDESTALS		ONLINE REPORTING
P2810	NFC (Proximity) Fob	FREE <ul style="list-style-type: none">• All active sites available online• Running tally of fuel use data available in real time online. Data can also be download in CSV format• Online management of vehicles and drivers
P2820	NFC (Proximity) Card	
P1032-S/S	Vehicle mount iButtons	
A1021 SF2 1800	Reader Wand	PRO: Fee/month <ul style="list-style-type: none">• Fully customisable reports<ul style="list-style-type: none">• Totals (total by vehicle, driver etc. on per site basis)• Reconciliation (reconcile fuel delivered against fuel consumed)• Service (identify vehicles/equipment due for service based on odometer or hourmeter entries)• Consumption (fuel consumption: litres per 100km, miles per gallon, litres per hour)• Export report to PDF or CSV format• Standard reports can be set up and emailed through on a monthly, weekly or daily basis in PDF or CSV• Automatic emails of tank levels at predefined times• Automatic emails of tank level alarms
SF2-PED-A	Pedestal for enclosure A	
SF2-PED-B	Pedestal for enclosure B	
SFA3200	Magnetic Swipe Card Reader (factory fitted)	
APPROVAL		
UL1238		
CONTACT INFORMATION		
 <p>Fuel Storage Systems Ltd 16 JB Cullen Dr North Business Park Ashburton 7740</p>		API Application Programming Interface (API) available that can be used to integrate data into accounting and other data management applications.

CONTACT INFORMATION



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