

**KNOW WHAT'S IN THE TANK.  
KNOW WHERE IT WENT.**



**Digit**FMS

**DIGIT D-FUEL**

**VEHICLE FUEL MONITORING SYSTEM**

# FUEL LOSS DOESN'T ALWAYS LOOK LIKE THEFT.

Fuel loss on vehicles is rarely dramatic. It hides in small inconsistencies, unexplained refills, and consumption that never quite adds up.

## FUEL LOSSES SHOW UP AS:

- Unexpected refuelling events
- Sudden drops in tank levels
- Inflated consumption figures
- Unexplained fuel additions
- Disputed driver reports

By the time questions are asked, the fuel is already gone.

## MANUAL FUEL TRACKING CREATES BLIND SPOTS

- Receipts are submitted after the fact
- Drivers rely on memory
- Consumption is estimated, not verified
- Theft, adds, and leaks go unnoticed



**Digit**FMS

DIGIT D-FUEL

MEASURED AFTER THE FACT. LOST IN THE GAPS.

# THE MARKET REALITY

## THE PROBLEM AND THE SOLUTION



### THE PROBLEM

When fuel is not measured at the source:

- Accuracy depends on people
- Loss is detected too late
- Accountability is unclear
- Disputes become routine

Fuel control becomes reactive.

### THE SOLUTION

Digit D-Fuel measures fuel continuously - inside the tank.

Every litre is:

- Measured automatically
- Recorded instantly
- Reported in real time

Fuel control becomes proactive, visible, and indisputable.



**Digit**FMS

DIGIT D-FUEL

CONTROL DOESN'T COME FROM TRUST. IT COMES FROM DATA.

# FUEL THEFT

## THE NUMBERS BEHIND THE RISK



### THE NATIONAL IMPACT

**R3.6 BILLION**

Lost annually to fuel adulteration and related fuel crimes in South Africa. Fuel theft is not isolated - it's systemic.

### WHAT FLEETS ARE REALLY LOSING

**5% - 15%**

Of total fleet fuel is routinely lost to theft.

**UP TO 20%**

Annual losses reported in **unmonitored fleets**.



### THE "INVISIBLE LOSS" PROBLEM

Small percentages translate into major financial exposure.

**R500,000+** PER YEAR

A **50-vehicle fleet** can lose over half a million rand annually from just **1 litre stolen per vehicle per day**.

**600 LITRES**

Recorded losses in a **single stop** during high-risk incidents. Fuel theft does not need to be dramatic to be expensive.



### ADULTERATION = ENGINE DAMAGE

**UP TO 68% PARAFFIN**

Found in seized contaminated diesel samples. Adulterated fuel leads to:

- Injector failure
- Engine damage
- Unplanned downtime
- Escalating maintenance costs
- Losses extend beyond fuel volume.



### HOW FUEL THEFT HAPPENS

Organised syndicates targeting logistics routes and pipelines. Border delays where trucks are siphoned while stationary. Internal collusion during refuelling.

#### Common methods:

- Siphoning
- Drilling tanks
- Electric pumps
- Fuel card manipulation

Fuel theft has evolved - so must prevention.



### INDUSTRIES MOST AFFECTED

- Logistics & transport
- Mining
- Construction & earthmoving
- Agriculture
- High-risk & remote operations
- Where fuel equals uptime, visibility matters.



### THE OPERATIONAL REALITY

**30% - 40%** Fuel represents up to **40% of total fleet operating costs**. Some businesses report: Weekend shutdowns to prevent losses, Vehicles unable to operate due to drained tanks, Increased security spend with limited results, Fuel-loss quickly becomes an operational constraint.



### THE TAKEAWAY

**UNMONITORED FUEL IS UNCONTROLLED FUEL**  
Without verified fuel intelligence, losses remain invisible until they impact profitability, reliability, and operations.



DigitFMS

DIGIT D-FUEL

FUEL INTELLIGENCE WHERE LOSSES BEGIN - INSIDE THE TANK.

# DIGIT D-FUEL VS CANBUS

## WHY TRUE FUEL MANAGEMENT STARTS INSIDE THE TANK

Many fuel monitoring systems on the market rely on CANBUS data pulled from a vehicle's ECU. This data was never designed for fuel auditing or theft prevention.

### DIGIT D-FUEL MEASURES FUEL DIFFERENTLY

It uses a calibrated probe installed inside the fuel tank, measuring actual fuel volume in litres at the source. This difference is critical.

#### UNDERSTANDING THE DIFFERENCE

##### CANBUS (ESTIMATE)

vs

##### DIGIT D-FUEL (MEASUREMENT)



What CANBUS actually measures

**CANBUS fuel data is derived from the vehicle's standard fuel sender unit - typically a float-based or resistive sensor designed purely to drive a dashboard gauge.**

**To improve driver experience, manufacturers apply heavy filtering and smoothing to this data.**

**The result:**

- Delayed updates
- Averaged readings
- Suppressed small changes
- Inconsistent litre conversion
- No real-time theft detection

**In simple terms:**

**CANBUS reads what the vehicle thinks is in the tank.**



What DIGIT D-FUEL measures

**DIGIT D-FUEL uses a calibrated probe installed directly inside the fuel tank.**

**It measures the physical fuel level in litres, independent of dashboard logic or ECU smoothing.**

**The result:**

- True litre measurement
- Immediate drop detection
- Accurate refuel verification
- Tank-specific calibration
- Real-time alerts and reporting

**In simple terms:**

**DIGIT D-FUEL measures what is actually inside the tank.**

ESTIMATE

vs

MEASUREMENT

VISIBILITY

vs

CONTROL



MEASURE WHAT MATTERS. CONTROL WHAT COSTS.

# CANBUS

## WHY CANBUS FALLS SHORT IN FLEET OPERATIONS

01

### ECU FILTERING HIDES THEFT

Vehicle ECUs intentionally smooth fuel data. Sudden drops may be delayed, averaged, or ignored - allowing small to moderate theft events to go undetected.

02

### NON-LINEAR TANK SHAPES

Commercial vehicle tanks are irregular in shape. A reported "60% fuel level" does not equal 60% of total litres without proper calibration. Most CANBUS systems do not provide true litre-based accuracy.

03

### IGNITION DEPENDENCY

Many CANBUS fuel values are unreliable or frozen when ignition is off.

Most fuel theft occurs while vehicles are:

- Parked overnight
- At depots
- At truck stops
- At border posts

If fuel cannot be monitored while stationary, exposure increases significantly.

04

### MIXED FLEET INCONSISTENCY

Different vehicle brands expose CAN data differently, resulting in:

- Varying accuracy
- Missing parameters
- Inconsistent reporting

CANBUS does not scale cleanly across mixed fleets.

05

### LIMITED FORENSIC VALUE

Filtered percentage data does not stand up well in:

- Internal audits
- Disciplinary hearings
- Supplier reconciliation
- Insurance investigations probe.



Digit FMS

DIGIT D-FUEL

IF IT'S NOT MEASURED IN LITRES, IT'S NOT CONTROLLED.

# DIGIT D-FUEL VS CANBUS

## OPERATIONAL REALITY & FORENSIC CONTROL



### MEASURING REALITY

DIGIT D-FUEL is engineered specifically for fuel control and accountability. It provides:

- True litre measurement
- Accurate refuel verification
- Continuous monitoring (engine on or off)
- Immediate drop detection
- Tank-specific calibration
- Audit-grade event reporting

### THE DECISION

#### WHEN CANBUS MAY BE SUFFICIENT

- General fuel trend visibility
- Driver-level awareness
- Basic consumption monitoring

#### WHEN DIGIT D-FUEL IS REQUIRED

- Preventing fuel theft
- Detecting abnormal losses
- Verifying refuels
- Reconciling litres to slips
- Enforcing accountability
- Managing high-risk environments

FUEL MANAGEMENT IS NOT ABOUT SEEING FUEL.

**IT IS ABOUT CONTROLLING FUEL.**

**IF YOU REQUIRE PROOF, YOU REQUIRE MEASUREMENT.**

**IF YOU REQUIRE MEASUREMENT, YOU REQUIRE A PROBE.**



**Digit**FMS

DIGIT D-FUEL

REAL FUEL CONTROL STARTS INSIDE THE TANK.

# DESIGNED FOR TOTAL *VEHICLE FUEL CONTROL*

FUEL ACCOUNTABILITY BUILT IN, NOT ADDED ON



*Digit* **FMS**

**DIGIT D-FUEL**

**VEHICLE FUEL MONITORING SYSTEM**

# CONTROL EVERY LITRE. AUTOMATICALLY.



**Digit D-Fuel is an intelligent vehicle fuel monitoring system** designed for fleets that cannot afford uncertainty, loss, or reliance on manual reporting.

**Installed directly into the vehicle's fuel tank, D-Fuel measures fuel levels continuously** - detecting consumption, refuelling, siphoning, and leaks in real-time.

**Fuel data is recorded instantly and synced to the cloud, giving fleet managers full visibility** without driver input, paperwork, or guesswork.

**NO RECEIPTS.  
NO ESTIMATION.  
NO ARGUMENTS.**



**Digit**FMS

**DIGIT D-FUEL**

**FUEL CONTROL WITHOUT HUMAN DEPENDENCY.**

# HOW DIGIT D-FUEL WORKS

AUTOMATED MONITORING. VERIFIED DATA.  
TOTAL VISIBILITY.



Digit D-Fuel creates a closed-loop vehicle fuel monitoring environment by measuring fuel directly inside the tank.

Fuel levels are monitored continuously before, during, and after every event. Refills, consumption, drops, and anomalies are detected instantly and reported automatically. Control happens at the source.

Reporting happens without delay.

## KEY SYSTEM ELEMENTS

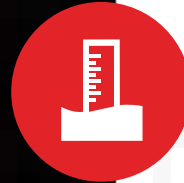
- Live Tank Level Monitoring
- Accurate Consumption Tracking
- Cloud Reporting & Alerts
- Local Device Intelligence



CONTROL AT THE SOURCE. CLARITY EVERYWHERE.

# D-FUEL PROCESS

## BUILT INTO YOUR TANK



### LEVEL SENSOR

Installed directly into the fuel tank, measuring fuel continuously - even small changes.



### DATA CAPTURE

Every fuel event is timestamped, logged, and stored automatically.



### VEHICLE LINKING

Fuel data is linked to the specific vehicle, route, and time.



### SECURE DEVICE & POWER

Designed for vehicle conditions with uninterrupted operation.



Digit FMS

DIGIT D-FUEL

FUEL CONTROL THAT MOVES WITH YOUR FLEET.

# OPERATION CONTROLLED. MANAGED.

## MANAGEMENT TOOLS

Fuel data integrates into operational and financial workflows, ensuring the right data reaches the right people.



## MULTI-TIER SETUP

Assign companies, fleets, and users with clear access levels.



## REMOTE DEVICE SETUP

Configure devices, thresholds, and alerts remotely - without vehicle downtime.



**Digit**FMS

DIGIT D-FUEL

CONTROL WITHOUT COMPLEXITY.

# SEE EVERY DROP. CONTROL EVERY OUTCOME.

REAL-TIME MONITORING WITH UNQUESTIONABLE ACCOUNTABILITY.



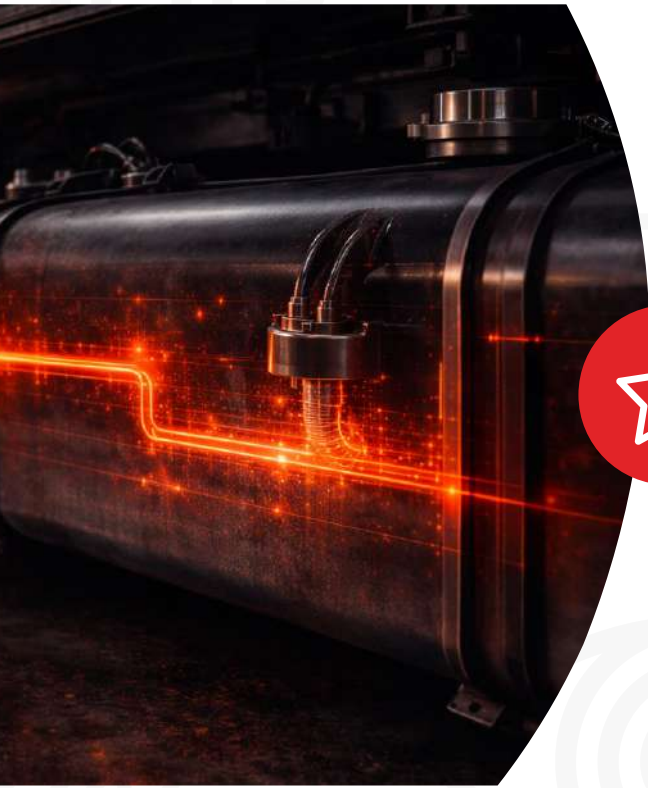
*Digit*FMS

**DIGIT D-FUEL**

**VEHICLE FUEL MONITORING SYSTEM**

# **CAPABILITIES & USE CASES**

**BUILT FOR FLEETS THAT TAKE FUEL SERIOUSLY.**



## **CAPABILITIES**

- Live fuel levels per vehicle
- Accurate consumption tracking
- Theft, siphoning & leak detection
- Real-time cloud reporting
- SMS & system alerts
- Mobile & desktop access



## **WHO D-FUEL IS FOR**

- Logistics & transport fleets
- Construction vehicles
- Mining fleets
- Agricultural operations
- Company vehicles
- High-risk routes



**DigitFMS**

**DIGIT D-FUEL**

**ANYWHERE FUEL MUST BE ACCOUNTABLE - EVEN ON THE MOVE.**

# REPORTING

MEASURE AT SOURCE.  
VISIBLE ANYWHERE.



## MANAGEMENT & REPORTING

- Consumption reports
- Refill detection
- Drop & siphon alerts
- Vehicle-specific fuel history
- Trend & comparison reports



## BUILT FOR AFRICAN CONDITIONS

- Low-data GSM operation
- Designed for harsh environments
- Proven in remote operations



**Digit**FMS

DIGIT D-FUEL

DESIGNED FOR REAL-WORLD CONDITIONS.



# FAQ

## HOW DOES D-FUEL DETECT FUEL THEFT?

**D-Fuel continuously monitors fuel levels inside the vehicle's fuel tank in real-time.** Any abnormal fuel-loss - such as sudden drops, siphoning, or unexpected drainage - is immediately detected and recorded. The system distinguishes between normal consumption and suspicious activity, providing clear visibility without relying on driver input or manual checks.

## HOW ACCURATE IS D-FUEL?

D-Fuel is designed for **high-precision fuel measurement**, delivering consistently accurate readings across varying operating conditions. The system provides reliable fuel level and consumption data that fleet managers can trust for decision-making, audits, and loss prevention.

## CAN D-FUEL BE INSTALLED ON DIFFERENT VEHICLE TYPES?

Yes. D-Fuel is compatible with **most commercial vehicles and fleet types**, including trucks, construction equipment, mining vehicles, and company fleets. It is installed directly into the vehicle's fuel tank, making it suitable for mixed fleets without operational disruption.

## DOES D-FUEL WORK IN REMOTE OR HARSH ENVIRONMENTS?

D-Fuel is built for **real-world operating conditions**, including remote sites, mining areas, construction zones, and high-risk routes. The system continues to monitor fuel accurately even in low-connectivity, dusty, rugged, or demanding environments.

## WHO TYPICALLY USES D-FUEL?

D-Fuel is trusted by:

- Logistics and transport fleets, Construction and earthmoving operations, Mining fleets, Agricultural operations and Businesses operating in high-risk or remote areas.

Any organisation where fuel accountability, cost control, and operational certainty are critical benefits from D-Fuel.



**Digit**FMS

**DIGIT D-FUEL**



**CLIENT  
TESTIMONIAL**



**CLIENT  
TESTIMONIAL**

**CLARITY BEFORE COMMITMENT.**

# **KNOW WHAT'S IN THE TANK. KNOW WHERE IT WENT.**

## **FOR MORE INFORMATION GET IN TOUCH**

Digit D-Fuel represents a shift from assumption-based fuel tracking to verified vehicle fuel intelligence.

If fuel accountability matters to your fleet, let's talk about what D-Fuel can do.

## **SPEAK TO A DIGITFMS SPECIALIST**

**WWW.DIGITFMS.CO.ZA**

**HO: +27 87 223 4448**

**EMAIL: info@digitfms.co.za**



## **WHO IS DIGITFMS**



**KNOW YOUR FUEL. PROTECT YOUR MARGIN.**