

# Genset Fuel Security & Analytics

## Real-time Anomalies With Predictive Runtime

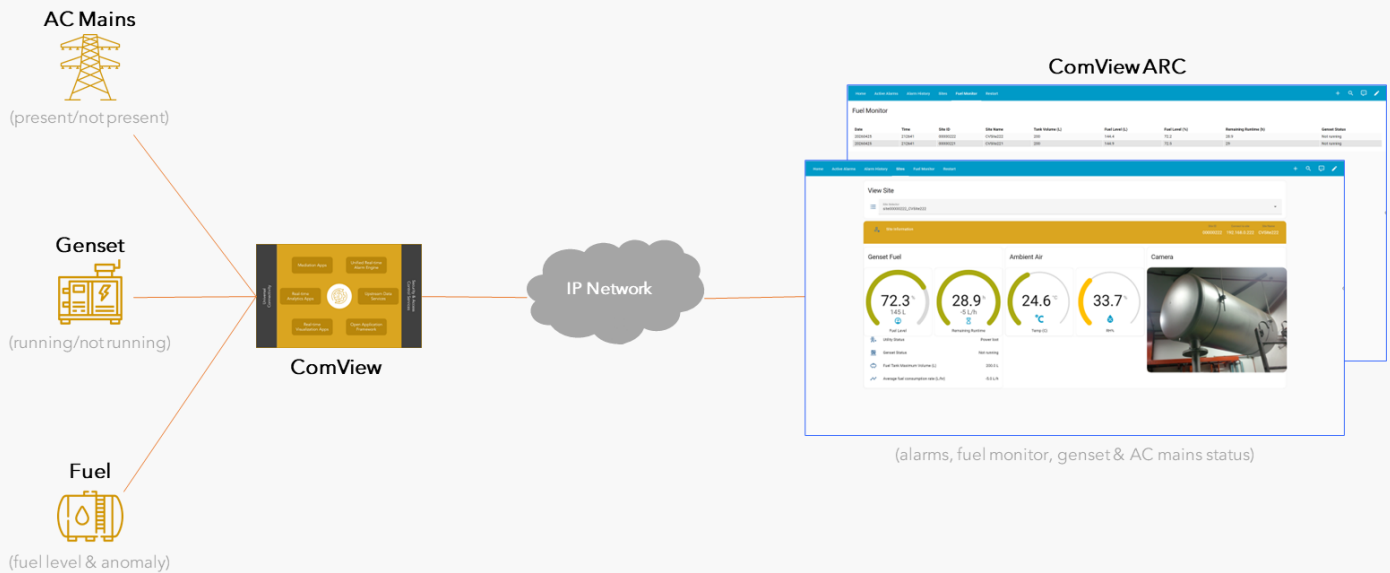
### The Challenge — Hidden Risks in Fuel-Dependent Sites

At remote RF and cellular sites, multiple power sources may be available — AC mains, solar arrays, wind systems, UPS units, and battery banks. But when all of these fail or become depleted, the diesel generator becomes the final layer of protection that keeps repeaters, backhaul radios, routers, and supporting infrastructure operational. Fuel-related issues, however, often develop quietly: consumption rates shift with load, refills may not match vendor deliveries, leaks can go unnoticed, and theft can occur between reporting intervals.

Without real-time, onsite intelligence, Operations teams are left reacting to outages, unexpected fuel shortages, or unexplained fuel expenses — all of which directly impact site survivability and operational budgets.

### The ComView Solution — Self-Learning Intelligence at the Fuel Tank

ComView elevates genset fuel monitoring from simple level reporting to a comprehensive, analytics-driven operational capability. By performing all analysis at the edge, ComView provides immediate detection, accurate predictions, and verifiable accountability for every liter of fuel.





### Predictive Runtime Intelligence

Self-learned consumption models deliver accurate remaining runtime estimates to help optimize refueling schedules.



### Fuel Theft Detection

Identify unauthorized fuel removal in real time with estimated volume lost for immediate response and expense tracking.



### Fuel Leak Detection

Detect slow or sudden leaks early to prevent environmental risk and unexpected runtime loss.



### Refill Verification

Validate vendor deliveries with estimated refill volumes for audit ready accountability.



### Immediate Alarm Reporting

Send alarms to ComView ARC, NOC/NMS platforms, enterprise systems, or cloud services.



### Edge Side Processing

Local statistical analysis ensures immediate detection, continuous monitoring, and high-resolution event logging even without backhaul connectivity.



### High-Resolution Fuel Records

CSV formatted performance data for every reading, including volume, rate of change, run state, AC mains state, and long-term averages.



### ARC Site View Integration

Visualize long term electrical trends, correlate power behavior with equipment performance, and detect slow developing issues early.



### ARC Fuel Monitor Integration

Network-wide fuel visibility with sites sorted by remaining percentage, estimated runtime, and tank capacity for fast refueling decisions.

## The Results — Total Fuel Accountability & Operational Predictability

ComView gives Operations teams complete control over genset fuel management:

- Prevent power outages with accurate, self-learned runtime predictions
- Verify vendor deliveries using real-time refill volume estimates
- Control expenses by accounting for every liter lost to theft or leaks
- Reduce OPEX by optimizing refueling schedules and eliminating emergency dispatches
- Strengthen site resilience through continuous, edge-side monitoring

Fuel becomes a managed asset — not an operational uncertainty.

## Who It's For

- RF and cellular site operators
- Public-safety communications networks
- Utilities and energy providers
- Transportation and railway communications sites
- Industrial and mining operations
- Any organization relying on genset-powered remote sites