

# FlowCommand



## RP32A + SYSTEM TECHNICAL SHEET

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### COMPANY OVERVIEW

**FlowCommand** is a full service technology company that provides software and hardware for oil & gas companies. FlowCommand's mission statement is simple: reduce water costs by using expertly architected technology. By collecting data on water transfers and hauling services, FlowCommand can identify overages and inefficiencies across a variety of water-related activities. Because FlowCommand has the industry's top development team and has engineered breakthroughs in automation component design, water data analysis isn't merely justifiable--it's lucrative.

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# AUTOMATED SENSORS

VoluSense and VeriFlow series automated sensors are used to track all water transfers and measure fluid levels down to the teaspoon. Using a combination of non-turbine based flowmeters and level sensor arrays, FlowCommand collects relevant data throughout the operation.

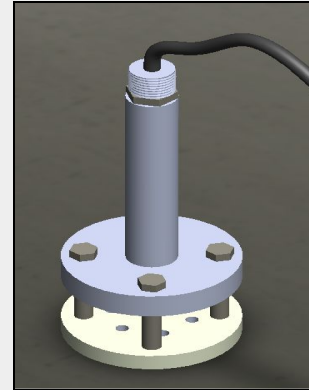
## CENTRAL INTELLIGENCE UNIT

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- **Modular components**
  - Installs in under 20 minutes
  - Advanced telemetry built in
  - Adding components is simple and plug & play
  - Multipoint Calibration allows for low cost accuracy in earth ponds
  - Unlimited flowmeter data feeds
- **Durable construction**
  - Meets weatherproof specifications for IP65 water and dust penetration
  - Polycarbonate enclosure meets UL94V-0 flame specifications
  - Keypad rated for four million cycles per key
  - UL approved intrinsically safe for Class I Div I Groups A-D hazardous locations

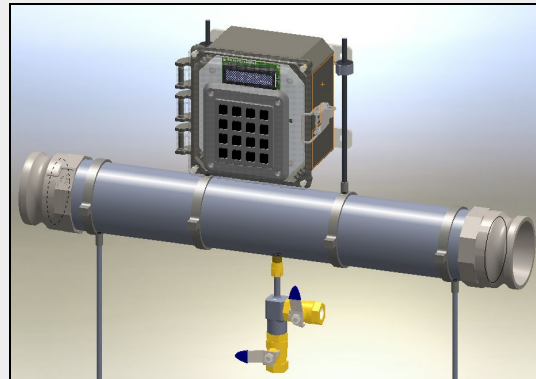
## LEVEL SENSING ARRAY

- Real-time monitoring of fluid levels
- 260 pound tensile strength shielded and vented cable for suspension and easy retrieval
- Custom level detection alarms can be set to notify operator or dispatch haulers
- Leak and overflow detection alarms can prevent disasters before they happen
- Multi-point calibration option for increased accuracy



## FLOW SENSING UNIT

- Unique pincode IDs for allocating transferred volumes
- Useable with haulers, fastlines, and permanent lines without modification
- Modifiable sampling rate
- No moving parts and minimal maintenance required



Pipe Size Range	2" - 10"
Tank or Pond Size Range	Unlimited
Operating Temp	-40°F to 140°F
Transmission Latency	30ms ± 10ms
Flowmeter accuracy	1% ± 0.5%
Level sensor accuracy (Tank)	0.5% ± 0.25%
Level sensor accuracy (Pond)	2% ± 1%*
Environment Rating	IP65

\*Level sensor accuracy in earth ponds can vary dramatically based on construction quality. With Multipoint Calibration, uncertainty can be reduced below 1%

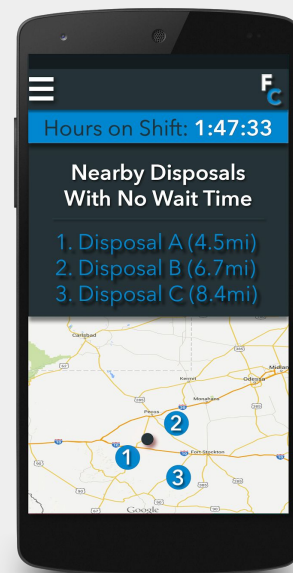
# GPS TRACKING APPLICATIONS

FlowCommand mobile applications allow operators to track every vendor, truck, and water hauler. This capability provides accurate and automatic validation of the routes and shift times on hauling invoices. GPS tracking applications also allow operators to remotely or automatically dispatch haulers to needed areas.

## FEATURES

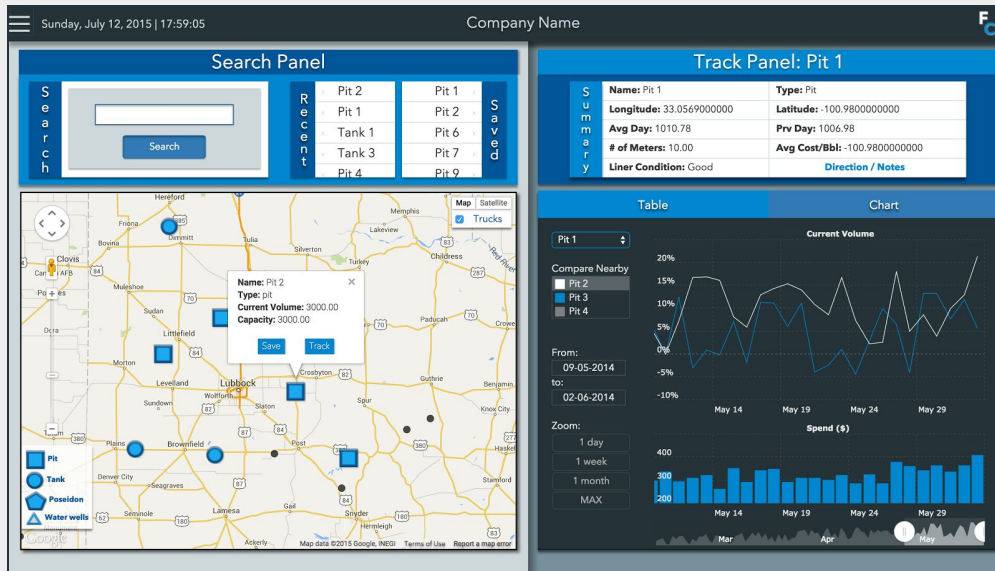
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- **Location and shift tracking**
  - Using the same pincode as for the sensors, haulers can start and end shifts on their own
- **Backloaded geofences for all areas**
  - Haulers automatically prompted upon approaching transfer point
- **Secure location sharing and vendor information**
  - Location coordinates transmitted live for real-time monitoring of truck locations
- **Custom driver self-reporting options**
- **Automatic or manual vendor dispatching**
  - Can integrate with RP32A sensors to automatically call out vendors based on real-time volumes
- **Dynamic Route Optimization**
  - Crowd sourced wait times optimally reroute trucks in real-time



# COMMAND CENTER

Web-based software gives operators real-time surveillance on all field activity--from live truck locations to fluid transfers and levels. Advanced graphing functions and predictive analytics allow operators to improve logistics coordination and identify potential emergencies before they happen.



## FEATURES

- **Field ticket creating and reporting**
  - Use data from sensors and GPS application to send accurate invoices to vendors
- **Invoice validation**
  - Integrate into invoicing software or use Command Center to easily validate tickets
- **Real-time monitoring of all fluid movement and levels**
  - Clearly view trends around water usage and transport
- **Real-time analytics on water operations**
  - Live updated predictions on frac fill-up completion dates
- **Predictive Alarms (avoid leaks, over calling out trucks for frac)**
  - Send alerts to customizable groups of key personnel
- **Accessible anywhere with no installation necessary**
  - FTP historical and real-time data to leverage existing data
- **Easily add and review entity conditions**