



**VENDOR
MANAGED GAS**
The First Affordable
Wireless Telemetry

VMG OVERVIEW

Vendor Managed Gas Telemetry
Developed by Wright Brothers Global Gas a VPP with
Verizon
VMG-Another Tool in your toolbox





Vendor Managed Gas (VMG) Telemetry

- Comprehensive gas management system for:
 - **High pressure cylinders**
 - **Liquid cylinders**
 - **Beverage**
 - **MicroBulk & bulk tanks**
- Affordable cellular and RF technology
- Remote access to gas levels, level alerts, temperature and usage charts
- GPS capabilities

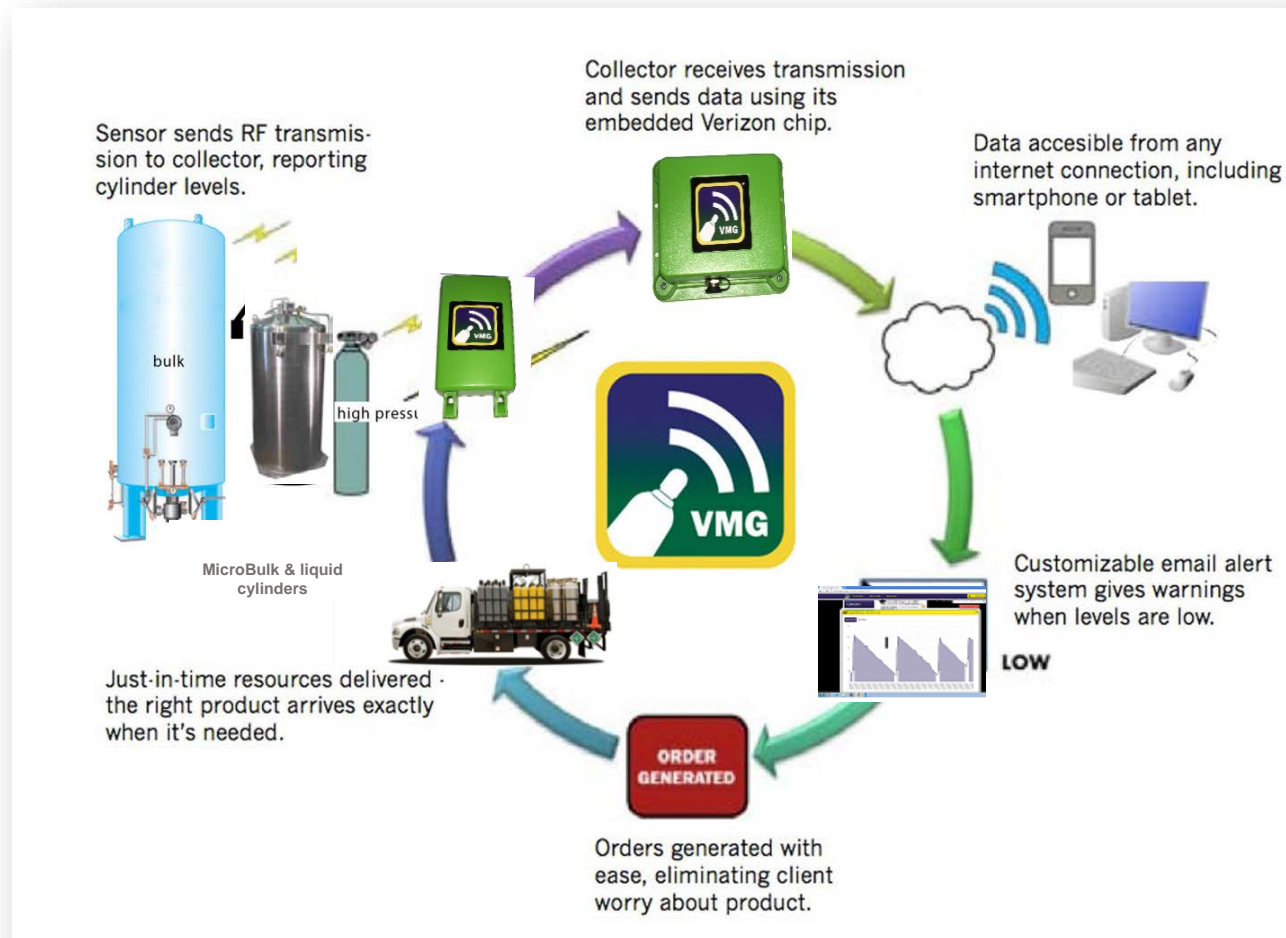


An Overview of VMG's Complete Telemetry Management

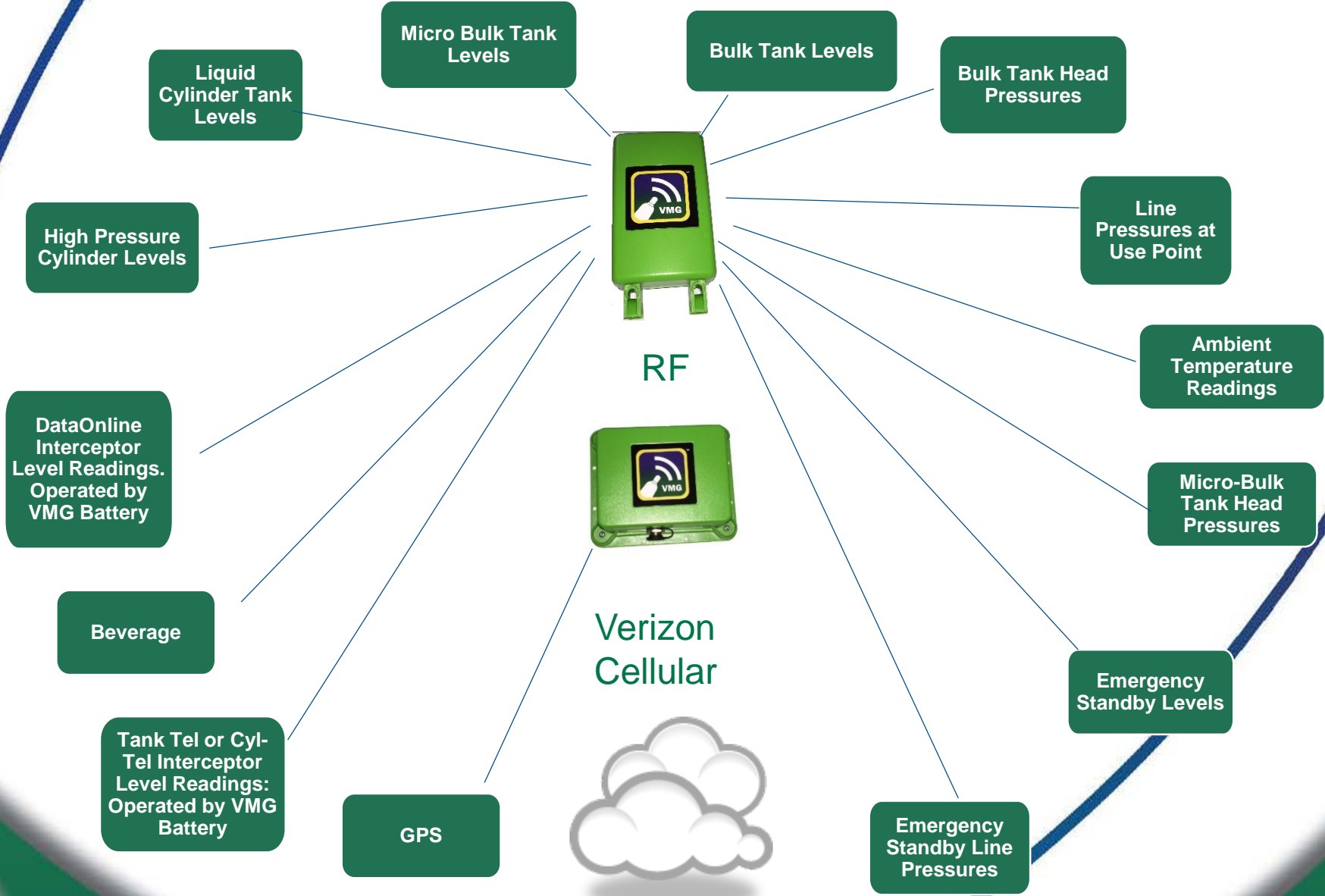
VMG units on each tank or cylinder measure:



- ✓ Gas levels
- ✓ Ambient temperatures
- ✓ Pressures
- ✓ High flow



VMG Complete Gas System Management





VMG SENSOR System Descriptions

1. **Bulk Tank Levels** – The VMG SENSOR connects to a VMG pressure differential block to read the liquid level. This will provide bulk tank percentage full reading.
2. **Tank-Tel or Cyl-Tel Interceptor-** VMG SENSOR intercepts the existing Tank-Tel or Cyl-Tel pressure differential block reading. This requires a specific interceptor wiring harness.
3. **DataOnline Interceptor** – VMG SENSOR intercepts the existing DataOnline pressure differential block reading. This requires a specific interceptor wiring harness for DataOnline devices.
4. **Micro Bulk Tank Levels** – VMG SENSOR monitors micro bulk tank levels through a VMG pressure differential block, Tank-Tel or DataOnline unit. VMG SENSOR can also monitor microbulk levels using a C-Stic to provide a percentage full reading.
5. **Liquid Cylinder Tank Levels** – VMG SENSOR will monitor liquid tank levels using a C-Stic to provide a percentage full reading (+-2%).
6. **High pressure Cylinder Level** –VMG SENSOR connected to a transducer can provide PSI readings and ambient temperature for high pressure cylinders.
7. **Beverage** - VMG SENSOR will monitor liquid tank levels using a C-Stic or a pressure differential block to provide a percentage full reading.



1. **Line Pressures at Use Points** –VMG SENSOR connected to a lower pressure transducer can provide PSI readings at use points to assure appropriate pressure. We offer a 0-300 PSI or 0-500 PSI transducer for this application.
2. **Bulk Tank Head Pressures** – VMG SENSOR with a transducer can be connected to the vapor phase line of the bulk tank to provide the gaseous bulk tank head pressure.
3. **Micro-Bulk Tank Head Pressures** - VMG SENSOR with a transducer can be connected to the vapor phase line of the Micro-Bulk tank to provide the gaseous Micro-Bulk tank head pressure.
4. **Emergency Standby Levels** – VMG SENSOR can be utilized in emergency backup applications. The VMG SENSOR system will monitor the backup tank(s) to ensure that the system will be ready if needed.
5. **Emergency Standby Line Pressures** – VMG SENSOR connected to a lower pressure transducer can provide PSI readings for the standby system to assure appropriate pressure. We offer a 0-300 PSI or 0-500 PSI transducer for this application.
6. **Ambient Temperature Levels** – Our VMG SENSOR provides the ambient temperature reading.
7. **GPS** – VMG COLLECTOR is GPS enabled allowing for stationary and mobile VMG applications. For example, a bulk cryogenic tanker truck can be monitored for location, DOT information and product level. (NOTE) The VMG GPS signal can be synced to the Verizon Networkfleet.



Be the first to market **VMG** to existing business

- Benefits to Your Business

- Generates monthly revenue and can allow for higher gas prices.
- Adding VMG allows for gas agreement extensions
- Immediately lowers Airgas distribution, operation and transaction costs.
- Protects existing business
- Builds a stronger supply chain with existing customer
- Manage the customers complete gas system
- Data collection and metrics for analyzing throughput and efficiency using data analytics
- Reduces carbon emissions by optimizing the delivery process
- VMG interfaces with todays technologies such as, computers, tablets or smartphones.
- Removes the dependency on DataOnline
- No development cost, using VMG equipment and website.
- Designed and manufactured for the gas industry within the gas industry.
- Affordable



User Benefits

- Customizable email alerts and warnings for gas system volume and performance
- Alerts for high usage
- Maximized uptime with no run-out
- Data collection and metrics for analyzing throughput and efficiency using data analytics
- Measures such as temperature, pressure and battery life visible on the dashboard, accessible through a computer, tablet or smartphone
- Off site management of gases to ensure experiments/ processes continue with no human interaction
- Reduced on-site cylinder balances



Key Markets

Who uses gas?

- **Chemicals**

- Research and production of specialty chemicals

- **Food & Beverage**

- Restaurant
- Casinos
- Breweries
- Beverage Bulk Distributors

- **Medical**

- Doctors
- Dentist

- **Fabrication**

- Manufacturing

- **Biotechnology**

- Research

- Air Pollution Control
- Building and Construction
- Chemical Processing
- Electronics
- Energy
- Food and Beverage
- Marine
- Metals and Metal Processing
- Mineral Processing
- Paint and Coatings
- Pharmaceutical
- Pulp and Paper
- Water and Wastewater



Equipment Needed By Storage Vessel Type

Only 1 Collector required within a 300 ft radius

Equipment	Sensor	VMG Pressure Differential Block (PDB)	Pressure Transducer	Intrinsically Safe Pressure Transducer	Interceptor Cyl-Tel/Tank-Tel / Data Online	C-Stic
Storage Vessel Type						
High Pressure Tank (non-flammable)	X		X			
High Pressure Tank (flammable)	X			X		
Liquid Cylinder	X					X
Micro Bulk Tank without PDB	X	X				X †
Micro Bulk Tank with PDB	X				X	
Bulk Tank without PDB	X	X				
Bulk Tank with PDB	X				X	
Line Pressure (monitoring)	X		X			

† Either C-Stic or the VMG pressure block can be used. Both are not necessary.