



WHITE PAPER DIALOGUE

TECHNOLOGICAL ADVANCEMENT IN METHANE EMISSION MONITORING

Ventbuster Instruments Inc. has filled a technology gap with the Ventbuster®. Until now, there has never been a vent gas metering device that can accurately, intuitively, and continuously measure, monitor, and record low and ultra-low flow methane emissions.

Through exceptional engineering and our cutting-edge technologies, we have the tools to enabling industry to reduce its methane emissions.

Our innovative technology is commercially available to the oil and gas industry.

JANUARY 2022



Our Mission: Ventbusters advances the oil and gas industry through exceptional engineering and cutting-edge technologies, enabling industry to reduce its methane emissions.

Our Vision: To advance knowledge and industry methodology around wellbore integrity, ensuring groundwater protection and the air we breathe.

Our Values:

- ✓ To Protect – with a commitment to preserving groundwater purity from hydrocarbon migration and champions to the cause of mitigating methane emissions to atmosphere.
- ✓ To Innovate - by further enhancing the science and technology supporting the qualification and quantification of venting emissions to the atmosphere.
- ✓ To Lead - by challenging the status quo and revolutionizing oil and gas operations while providing professional service and industry-leading instrumentation.
- ✓ To Offer Integrity – by conducting ourselves, with the highest degree of ethics, while delivering services in a timely, professional, and cost-effective manner.
- ✓ To Collaborate - by continuing to develop, design, and engineer many of the industry's methodologies and instrumentation in partnership with clients and contractors.
- ✓ Provide Excellence - To do the best and be the best at what can be done!

1. INTRODUCTION:

With increasing environmental concerns, the need to reduce greenhouse gas (GHG) emissions and coupled with governmental mandates, the oil and gas industry must improve the accuracy and economics of measurement, monitoring, and reporting such emissions.

Our domestic energy industry is committed to sustainable environmental practices and strategic initiatives around reducing GHG emissions. The impending legislation of Climate Leadership Plans are driven by the continued and limitless atmospheric release of surface casing vent flow (SCVF) gases, fugitive emissions from orphan/abandoned wells, and ever-increasing natural gas production and its associated venting of dry and solution gases.

Ventbusters Inc. is a specialty consulting company that has become an industry leader in SCVF repair and oil and gas wellbore integrity restoration. Our reputation and expertise in SCVF measurement, evaluation and diagnostics and mitigation has given us a unique perspective and knowhow into highly accurate and repeatable qualification and quantification of low and ultra-low vent flow rates and pressures.

In 2016, Ventbusters Inc. embarked on a research and development initiative because we needed advanced instrumentation to support our core business. This technology is necessary to assist us and industry, in meeting impending regulatory changes and accountability requirements for venting methane emissions being released



into the atmosphere. In 2019, we succeeded in our quest and patented the first and only precision vent gas metering technology that is an intuitive, accurate, and provides a live continuous measurement with the highest degree of granularity, from ultra-low to high flow rates and pressures. As a result of our success, we founded Ventbuster Instruments Inc., to commercially manufacture, distribute, and support our tech for the oil and gas industry.

“We have filled the technology gap enabling industry to measure the immeasurable.”

2. CURRENT INDUSTRY CHALLENGES:

Energy Regulators are enforcing atmospheric GHG emission regulations around fugitive and venting emissions from oil and gas wells, field processing operations, production storage facilities, pneumatic instrumentation, compressors packing vents, on-site flaring and incinerating.

For example, the Alberta Energy Regulator (AER) has set emission reduction targets that will result in a 45% reduction of methane emissions by 2025 from 2014 levels. The Government of Canada mandates a 40 to 45% reduction of methane emissions by 2025 from 2012 levels. New federal restrictions that were scheduled for 2018 are now to be phased in between 2020 and 2023, requiring energy producers to regularly check equipment, make immediate repairs, use “cleaner” technologies, continuously monitor emission levels and report.

Similar to Canada, the United States has now set emission reduction targets to reduce methane emissions from the oil and gas sector by 40 to 45% below 2012 levels, by 2025. Significant changes have been announced for Colorado that became effective in May 2021. New well sites will be required to use zero-venting pneumatics and producers will have until May 2022 to start retrofitting old well sites with zero-bleed pneumatics.

Reaching these targets will require significant action by the industry to reduce and eliminate methane venting.

On May 12, 2020, the AER released a new edition of Directive 17 outlining new measurement requirements for oil and gas operations. The new objective is to move industry towards methane emission reduction through improved reporting requirements.

As of April 21, 2021, the AER has released a new edition of Directive 60, outlining revised requirements for flaring, incinerating and venting in Alberta at all upstream wells and facilities. This also applies to pipeline installations that convey natural gas, with the exception of oil sands mining schemes and operations. These requirements have been developed in consultation with the Clean Air Strategic Alliance. British Columbia and Saskatchewan are following suit.

On April 21, 2021, the AER released a new edition of Directive 20 replacing the 2018 edition, which ties into and supports the new AER Directive 87, released on March 4, 2021. Both Directives have new requirements for testing and monitoring SCVF emissions but Directive 87, specifically focuses on the new well integrity management requirements around testing reporting and repair of packer isolation, casing failures, SCVF’s and gas migration. Again, British Columbia and Saskatchewan are following suit. It is reported that several States in the USA are looking to emulate the requirements and guidelines of AER Directive 20 and 87.



The AER will be enacting legislation that will require new measurement requirements to replace conventional Gas-Oil-Ratio (GOR) testing and prorating of solution gas volumes that are vented in conjunction with Cold Heavy Oil Production with Sand (CHOPS) well production. These emissions will have to be continuously monitored and reported to the Regulator. Industry is looking to Ventbuster Instruments for a metering alternative, that can provide accurate, real time quantification of these immeasurable emissions

All these Directives and Regulations are intended to move industry toward improvements of its methane emission quantification and qualification technologies, leading to methane emission reduction and abatement.

Most single-sourced venting emission rates and pressure are too low for conventional gas metering capabilities. Establishing a quantifiable baseline for emissions is impossible for Industry and Regulators to accurately measure and report. This leads Industry to produce pseudo emission reports from outmoded gas meters. In turn, Governments or Regulators make hypothetical assumptions for inflated estimates when imposing emission penalties.

Without scientific and precision measurement of methane emissions, impending legislation is anticipated to negatively impact the oil and gas industry by arbitrarily limiting allowable vent emissions, resulting in stiffer carbon taxation.

A precision vent gas metering device with a high degree of granularity is required to provide a consistent, repeatable and undisputed baseline measurement for carbon trading. There must be single proven technology that can be universally deployed to provide the “gold standard” quantification and reporting of methane emissions for carbon without mixing and matching of various gas meter types, sizes, or methodologies.

Ventbuster Instruments’ technological advancements provides the cost effective and efficient means to have accurate, continuous, real-time emissions monitoring. Using our tech, Industry now has that precision tool that provides a digital record of its actual emissions. We enable industry to get out ahead of impending regulation, levies, and taxation, by understanding and identifying emissions hot spots. Furthermore, it empowers our Industry to properly plan, budget, design and engineer the most cost-effective mitigation measures.

3. OUR SOLUTION:

Ventbuster Instruments Inc. has filled the technology gap with the Ventbuster® and Ventsentinel®. Our advanced patented technology is now commercially available to the oil and gas industry.

We have a built-for-purpose quantification solution with our patented core technology, a novel flow channel with an incredible turndown ratio capable to measure all ultra-low to high flow emission flow rates and pressures beyond the range of any existing gas meter on the market. Our smart meter technology can be economically mounted in-line to any vent assembly to precisely measure and digitally record all flow ranges of GHG gas emissions in relevant real-time.

Ventbuster Instruments Inc. was incorporated in 2019 as part of the Ventbuster Group of Companies. It has taken four (4) years of comprehensive, fastidious research and development (R&D) work from Ventbusters Inc., which has pilot manufactured sophisticated instruments to enable monitoring, diagnosing, measuring and testing venting methane emissions from all types of methane vent assemblies.



The result is:

- No more “bubble” testing,
- no more subjective testing,
- no more human error,
- no more “block-and-bleed” techniques,
- no more algorithms,
- no more inaccurate positive displacement or differential pressure gas meters,
- no more unquantifiable results from open-range monitors,
- no more pseudo emission estimates from optical gas imaging devices or forward-looking infrared cameras.

Our innovative technology is revolutionizing venting emissions measurement. We have made the assessment of vent flow emissions easier than ever before by enabling on-site personnel to conduct intuitive and sophisticated testing or install continuous monitoring. This, in turn, drives down overhead and testing costs for regulatory compliance.

In most instances, when vented solution gases cannot be measured accurately by conventional gas meters, it must be prorated with time-consuming and costly gas-oil-ratio (GOR) tests. Such testing needs to be completed on a repeatable schedule to ensure vented solution gas is being properly accounted, relative to oil production. The actual volumes of vented gas often exceed regulatory allowances, resulting in penalties to the producer. Using Ventbuster’s tech, a real-time, continuous and granular measurement of these low gas flows, allows the producer to manage the production of the solution gases, before a penalty happens.

The ability to accurately quantify and qualify immeasurable venting emissions also enables producers to analyze the volumes of escaping methane to determine the potential value of capturing to a vapour recovery system, compressor, pipeline, or incineration.

4. OUR SUPERIOR TECHNOLOGY:

We have mastered and unlocked the science of low volume/low-pressure gas measurement technology as it needs to be applied specifically to the engineering and operational challenges around venting methane emission measurement.

We knew the advantages and disadvantages of current gas flow measurement technologies around venting emissions and how specific applications are not as susceptible to changes in pressure or temperature. However, the technology to precisely and accurately measure venting methane had yet to be developed to meet the needs and the demands of emission monitoring in the oil and gas fields. Our patented and novel design does not require an induced pressure drop to formulate algorithms that compute flowrate. Venting emissions flow at low pressures, and it is virtually impossible to use a pressure drop to calculate flow, let alone move a mechanical impeller, paddle, diaphragm, or other applicable equipment. Our unique flow measurement technology has excellent repeatability, no moving parts, and is easy to install. Without inducing a pressure drop, our technology is the best candidate to operate in both ultra-low and high flow regimes and an ideal concept for measuring GHG venting systems to the atmosphere.



Ventbuster Instruments Inc. overcame the challenges of adapting this technology. With the Ventbuster® and Ventsentinel®, venting methane flow metering is no longer limited to restrictive flow ranges or turn down ratios, no longer highly susceptible to fouling from impurities in the vent gas stream, and no longer a fragile platform.

The key is in our patented flow channel technology. Our invention is vital to ace the science of venting emissions measurement. Our research and development efforts have improved upon current technologies, and we conceived an ideal flow channel suitable to operate within the rigours of oil and gas field conditions.

Decades of industry experience have gone into the invention of both the Ventbuster® and Ventsentinel®, a user-operated and installed, intuitive, smart emissions meter that provides real-time, live data and reports, simplifying and economizing vent flow monitoring. We have also incorporated flowing temperature and flowing pressure recording technology into the Ventbuster® to assist in a more qualitative measurement and understanding of the venting emissions stream.

“We have the better mousetrap for vent gas measurement.”

5. THE OTHER GAS MEASUREMENT TECHNOLOGIES:

There are currently six (6) other fundamental gas flow technologies used in an attempt to measure or monitor GHG emissions. Many technologies are not suited for ultra-low vent flow rates and pressures. Pressure differential or positive displacement meters merely estimate flow rate using algorithms in these regimes. Nor can they measure slugging, intermittent, or continuous vent flows. Fugitive emissions monitoring devices, such as open-range optic devices or infrared cameras, cannot directly and accurately measure these volumes or rates. Instead, these devices use applied estimations, rules-of-thumb, and suppositions to report a pseudo flow.

Below is a quick overview of the other gas instruments currently being used ineffectually to measure venting emissions to the atmosphere:

5.1 FLIR and LDAR Imaging Systems:

Thermal imaging cameras are devices that translate thermal energy (heat) into visible light to analyze a particular object or scene. The image produced is known as a thermogram and is analyzed through a process called thermography. All objects absorb, reflect and sometimes transmit energy at different levels.

Although a unique instrument, the image must use advanced algorithms to estimate the volume of the gas cloud from a two-dimensional image. Additional algorithms must be employed to read the correct temperature values of the image. The ability to capture a three-dimensional image of the gas cloud and accurately determine the resultant volume is in continual development. Ambient temperature, atmospheric pressure, weather, wind speed, and direction limit this to a detection-only technology.

An analogy of this is observing an automobiles exhaust in the extreme cold of winter and to somehow precisely determine how much carbon monoxide gas is being released into the atmosphere.



5.2 Differential Pressure (DP) Meters:

DP flowmeters calculate the flow by measuring the pressure drop over an obstruction inserted in the flow. Common types of flow elements are Orifice Plates, Flow Nozzles and Venturi Tubes.

Advantages: Simple in concept with relatively good accuracy in medium to high flow ranges. Commonly accepted and established method of produced gas and solution gas flow measurement—the oldest, most popular and suitable for production gas streams within field handling facilities.

Disadvantages: Limited turndown ratio, poor low flow sensitivity, and zero ultra-low flow ability. Requires separate pressure and temperature measurement to formulate a mass flow interpretation. It uses a pressure drop, which is not desirable for low-pressure venting systems to the atmosphere—limited to clean and dry gases. Considered cost-prohibitive, as it requires housing against weather, is ambient temperature sensitive, extensive pipefitting requirements and inability to handle flow over-ranging from slugging or intermittent flow regimes.

5.3 Positive Displacement (PD) Meters:

PD meters require fluid to displace or move internal components and measure volumetric flow mechanically—common types: diaphragm, rotary vane, reciprocating piston, nutating disc, and impeller.

Advantages: Relatively good accuracy in its respective flow range. An accepted method of produced gas and solution gas flow measurement. Suitable for most production gas streams in-field process conditions.

Disadvantages: Limited turndown ratio and poor low flow sensitivity, and zero ultra-low flow ability. Requires pressure and temperature compensation and applied algorithms to get mass flow interpretation. The resultant frictional pressure drop from mechanical momentum is not suitable for venting systems to the atmosphere. Can often experience “blow-by” which compounds the inaccuracy of the device. It is limited to clean dry gases—an inability to handle flow over-ranging from slugging or intermittent flow regimes.

5.4 Coriolis Meters:

Coriolis flowmeters provide a direct mass flow measurement based upon the deflection force of the fluid moving through a vibrating tube.

Advantages: It is very accurate with relatively higher turndown capabilities than other gas flow devices and is independent of fluid properties.

Disadvantages: Expensive to purchase and install and has large pressure drop, which is not suitable for venting regimes to the atmosphere. Unable to measure the required low and ultra-low vent flow rates and pressures. More suited for controlled, clean process environments, not operationally suitable for oil and gas field conditions.

5.5 Ultrasonic Flow Meters:

Ultrasonic meters measure the difference in transit time of pulses that travel from a downstream transducer to the upstream transducer, compared to the time from the upstream transducer back to the downstream transducer.

Advantages: Extremely accurate in higher flow regimes.

Disadvantages: Costly to purchase and install, requiring external and continuous plant power. Unable to operate in the ultra-low regimes. Requires external pressure and temperature measurement. Induced pressure drops are not suitable for venting systems to the atmosphere. More suited for controlled gas plant process environments.

5.6 Vortex Flow Meters:

Vortex meters utilize a shedder bar that is placed in the flow path. As gas flows around this shedder bar, vortices are cyclically generated from opposite sides of the bar. The frequency of vortex generation is a function of the gas velocity.

Advantages: The frequency of vortex shedding is independent of gas composition.

Disadvantages: Requires pressure and temperature compensation. Requires a minimum flow rate to generate vortices, unable to operate in low and ultra-low flow regimes. Not suitable for venting systems to the atmosphere. More suited for controlled process environments and not suitable for oil and gas field conditions.

6. THE MARKET ENVIRONMENT:

6.1 Source: Environment and Climate Change Canada, per the AER.

About 70% of total Alberta methane emissions come from the oil and gas industry, with estimated emissions of 31.4 megatonnes/year CO₂e.

- Nearly 48% of these emissions are related to venting.
- Nearly 46% of these emissions are related to fugitive emissions (leaks).
- Nearly 6% of these emissions are related to flaring operations.

6.2 Surface Casing Vent Flow (SCVF): The Ventbuster®

In Western Canada, the revised AER Directive 20 and new AER Directive 87, both released in 2021, state that if a SCVF is detected, a metering device must be used to obtain a stabilized flow rate and shut-in pressure. The bubble test is no longer a valid test for quantifying and reporting a SCVF. In addition, all producing and inactive wells must be frequently inspected, and the SCVF tested and reported. This now directs the producer to obtain a digital measurement of stabilized gas flow rate and stabilized shut-in pressure. Both require precision

measurement of what is usually a low to ultra-low gas flow rate and pressure beyond the capabilities of available gas meters.

AER statistics state that in Alberta, a total of 430,000 wells have been drilled. Of those, upwards of 150,000 have been permanently abandoned (cut and capped). This leaves at least 280,000 producing or suspended (inactive) wells to which these regulations apply. The occurrence of active SCVF ranges regionally, anywhere from 18 to 30% of this well count, representing a possible 80,000 wells venting methane gas emissions to the atmosphere. British Columbia and Saskatchewan combined would represent around 35% of the Alberta estimates.

Of the above totals, the industry has been averaging a range of between 3000 to 5000 well abandonments annually in Western Canada. All are subject to preliminary SCVF testing, ongoing monitoring throughout the abandonment and SCVF repair, followed by confirmation of a negative SCVF at the time of cutting and capping the well.

Installing the Ventbuster® onto a wellhead SCV assembly while undergoing repairs to restore wellbore integrity has proven invaluable to our customers. It enables real-time prognoses, and it continuously illustrates the effectiveness of the repair. It provides a live picture of the dynamic changes being impacted by the ongoing intervention measures while significantly improving the chances of a successful restoration.

Regulations also state that before any other work such as well completion, recompletion, workover or suspension, a SCVF test is to be conducted and reported.

All new wells drilled in Western Canada are subject to regulation which dictates that the SCV must be tested for emissions and reported within 90 days of rig release.

The United States is following suit and will soon have the same level of SCVF reporting and monitoring that we see in Canada.

The Ventbuster® is currently deployed in the United States as a touchstone measurement tool to identify, quantify and digitally record methane emissions from orphaned and abandoned oil and gas wells. Each well's emission rate must meet a rigorous regimen of precise flow rates and flow characteristics, as outlined with State Regulators and Carbon Registries. Exacting quantification is required to sanction the allotting of carbon credits. Resultant carbon trading allows for the raising funds to offset the costs of plugging and decommissioning wells, which in turn leads to the restoration the impacted lands.

It has quickly become apparent that Ventbuster Instruments' technology is ideal with its built-for-purpose design, for methane emission monitoring accuracy and functionality. It is the only instrument which meets and exceeds the requirements of emission quantification as laid out by the Carbon Registries.

6.3 Permanent and Continuous In-Line Vent Flow Monitoring – The Ventsentinel®

Our latest technological release of the Ventsentinel® is an adaptation of the Ventbuster® flow channel. It was designed initially for solution gas venting measurement around solution gas monitoring for CHOPS wells. Since then, Industry has identified the requirement for a technical improvement of venting emissions measurement



to meet the current AER Directive 17 requirements and anticipated Governmental legislation around methane emission reduction targets, carbon levies and potentially carbon trading.

In Western Canada, it is estimated that there are roughly 280,000 producing or suspended wells, most of which vent some volume of methane into the atmosphere through the production process. The Ventsentinel® has validity for numerous in-line placements on each wellsite or facility to measure and monitor methane emissions. The placements could be on wellheads, production tanks, produced water tanks, relief valves, vented underground tanks, compressor seals, instrument air compressors, fuel gas lines, flare lines or incinerators.

A GOR test typically prorates solution gas generated from oil production and cannot be measured accurately by conventional gas meters. Third-party GOR testing must be completed regularly, ensuring the vented solution gas is being calculated relative to oil production. The volumes of vented gas often exceed regulatory allowances. Real-time monitoring and measurement would allow the customer to manage the production of the solution gases before a penalty occurs.

The Ventsentinel® replaces GOR testing and saves excessive production accounting hours associated with government submissions. The Ventsentinel® provides real-time data, which is also utilized to optimize inflow production resulting in increased well revenue.

The ability to quantify and qualify all venting methane emissions enables producers to analyze these volumes to determine the value of methane capture.

The Ventsentinel® will be an essential instrument used by Industry, Government, Regulators and, Carbon Registries for the current and proposed carbon levies and credits. It will accurately obtain baseline data for understanding and determining the real methane emission rates, venting into the atmosphere from oil and gas production.

6.4 The Target Market – Ventbuster®

Primary target customers for the Ventbuster® are producers, engineering consulting companies, third-party service providers who conduct emission monitoring, environmental consulting firms, and surface reclamation companies. Regulators would also use our technology to perform inspections, audits and compliance checks.

- ✓ **SCVF Testing and Repair Monitoring**
- ✓ **Wellbore Decommissioning/Abandonments**
- ✓ **Leaking Well Integrity Restoration**
- ✓ **Orphan Well Emission Testing**
- ✓ **Carbon Emission Quantification/Qualification Testing**
- ✓ **New Drilled Well 90-day Testing**
- ✓ **Annual Inactive Well - SCVF Tests/Inspections**

** Note: the inactive emissions testing is initially conducted using the Ventbuster® and for continuous long term monitoring the Ventbuster® could be replaced with the Ventsentinel® in what would be presumed to be more economical.*

6.5 The Target Market – Ventsentinel®



Primary target customers for the Ventsentinel® are all producers and process control instrumentation companies. This technology enables industry to get out ahead of impending regulation, levies, and taxes. Furthermore, it empowers industry to establish an emissions baseline to properly plan, budget, design and engineer the most cost-effective mitigation measures. Then, methane emission reduction can be measured, charted and registered for carbon credits and trading.

- ✓ **Cold Heavy Oil Production with Sand (CHOPS) Solution Gas Monitoring**
- ✓ **Instrument Air Compressors Monitoring**
- ✓ **Compressor Packing Vent Monitoring**
- ✓ **Oilfield Storage Tank Vent Monitoring**
- ✓ **Fuel Gas, Flare Lines and Incinerators Emission Monitoring**
- ✓ **Noxious Gas Emission Monitoring**
- ✓ **Carbon Commodity Allocation - Credit and Trading commodity**
- ✓ **Landfill Methane Emissions Monitoring**

7. THE NEXT PHASE:

7.1 Ventbuster Instruments Inc., Valuation Strength:

With our commitment to continued advancement and adaptation of our flow channel technology, we foresee applications to all venting GHG monitoring across all industrial sectors. Be it from gasoline and diesel storage tank vapour monitoring, landfill methane monitoring, wastewater biogas monitoring, pulp and paper emissions monitoring, mining and agriculture, our technology can be applied collaboratively to solve the challenges around baseline GHG qualification and quantification monitoring.

Our initial launch of the Ventbuster® was in Alberta. We are now deployed across Western Canada and most recently throughout various States in the USA. We intend to follow that up with the commercial launch of the Ventsentinel® in the latter part of 2022. During which we are looking to break through in the United States with an Industry Partner for scaling up and commercialization strength. After that, we will look internationally towards countries with methane reduction commitments.

7.2 The Ventbuster® now provides:

- Regulatory compliant SCVF and well emissions testing and monitoring.
- Scientifically sound, field-tested, and proven flow monitor can detect the smallest of flows from "one bubble in 10 minutes" (0.04 ml/minute) to 430 m3/day (16.0 mcf/d), using only one flow metering device and technology.
- A state-of-the-art, intuitive, pressure device for shut-in pressure stabilization testing.
- Reporting of digital real-time flow rates, flowing pressures, flowing temperatures, and shut-in pressures to the IoT Platform.
- Cost-effectiveness through enabling on-site personnel to easily install and conduct SCVF testing without calling for expensive testing equipment.
- Assured safety on location by reducing non-essential personnel travelling to and working on the well site.



- Intrinsically safe operation and the only Hazardous Area Certified – Zone 0 Group IIB T3 vent flow monitoring device on the market.
- Live client monitoring of wells through an interactive online Web Portal.
- Automatic generation and customization of regulatory-ready PDF reports for submission.
- Test data available in CSV and EXCEL formats
- Access to real-time, ongoing tests or historical data from anywhere.

7.3 The Ventsentinel® will provide:

We are working with industry partners to finalize our commercial field trials in Q1-2022 and will be moving towards commercial manufacturing and roll-out in late 2022, with the following key performance indicators:

- ✓ High turndown ratio that can measure GHG flow ranges from ultra-low flows to over 6000 m3/day (200 mcf) using only technology.
- ✓ A patent pending flow channel has no restrictions and zero pressure drop through the in-line flow path.
- ✓ Continuous real-time monitoring to accurately record erratic, intermittent or constant stream flow rates over time.
- ✓ An adaptable power port for 120v AC plant power or an independent 12v @ 100mA solar-powered battery source.
- ✓ An adaptable communication port that interfaces using Modbus SCADA systems or other gateway communication platforms.
- ✓ Permanent and straightforward installation for numerous in-line placements.
- ✓ Ability to measure and record shut-in pressures as required for various applications.
- ✓ Intuitive self-check start-up characteristics to be operational and programmed in minutes.
- ✓ Free liquids in the solution gas stream are knocked-out at the inlet of the Ventsentinel®.
- ✓ Weather-proof and functions in ambient temperatures ranging from -40°C to +55°C.
- ✓ Onboard intuitive software and firmware.
- ✓ Flows are corrected to standard temperature and pressure.
- ✓ Operating pressure range from 0 to 5000 kPa (0 to 725 psi).

For further information about Ventbuster Instruments and our technology, please visit our website at www.ventbusters.com. Here you will be able to gain insight into our technology, its function and deployment. The website also contains technical data sheets and other information documents for reference.

