BPC INSTRUMENTS

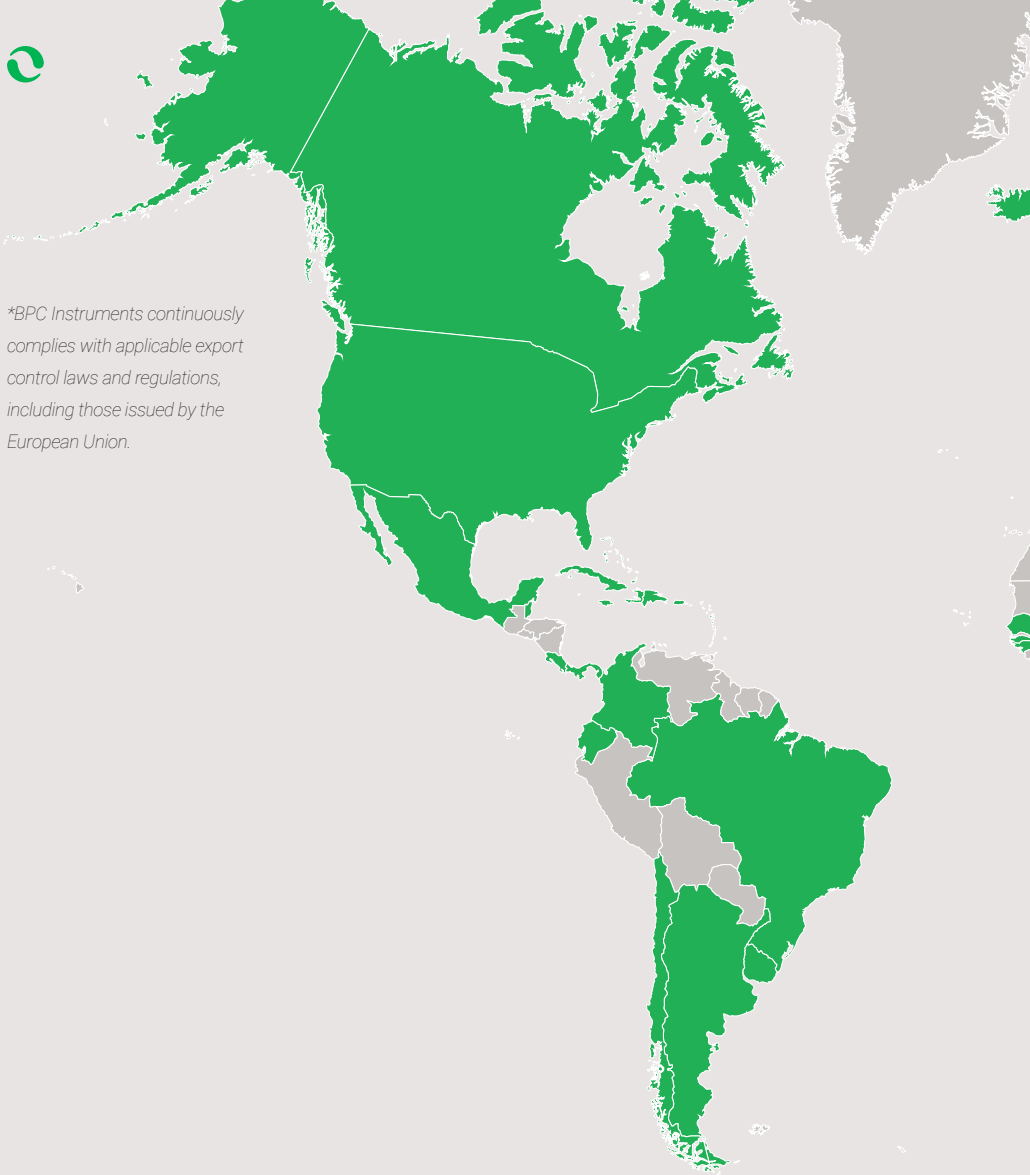
General Product Overview


BPC INSTRUMENTS

For over 20 years, BPC Instruments has developed automated analytical tools for biogas, biodegradability, wastewater, and animal nutrition research.

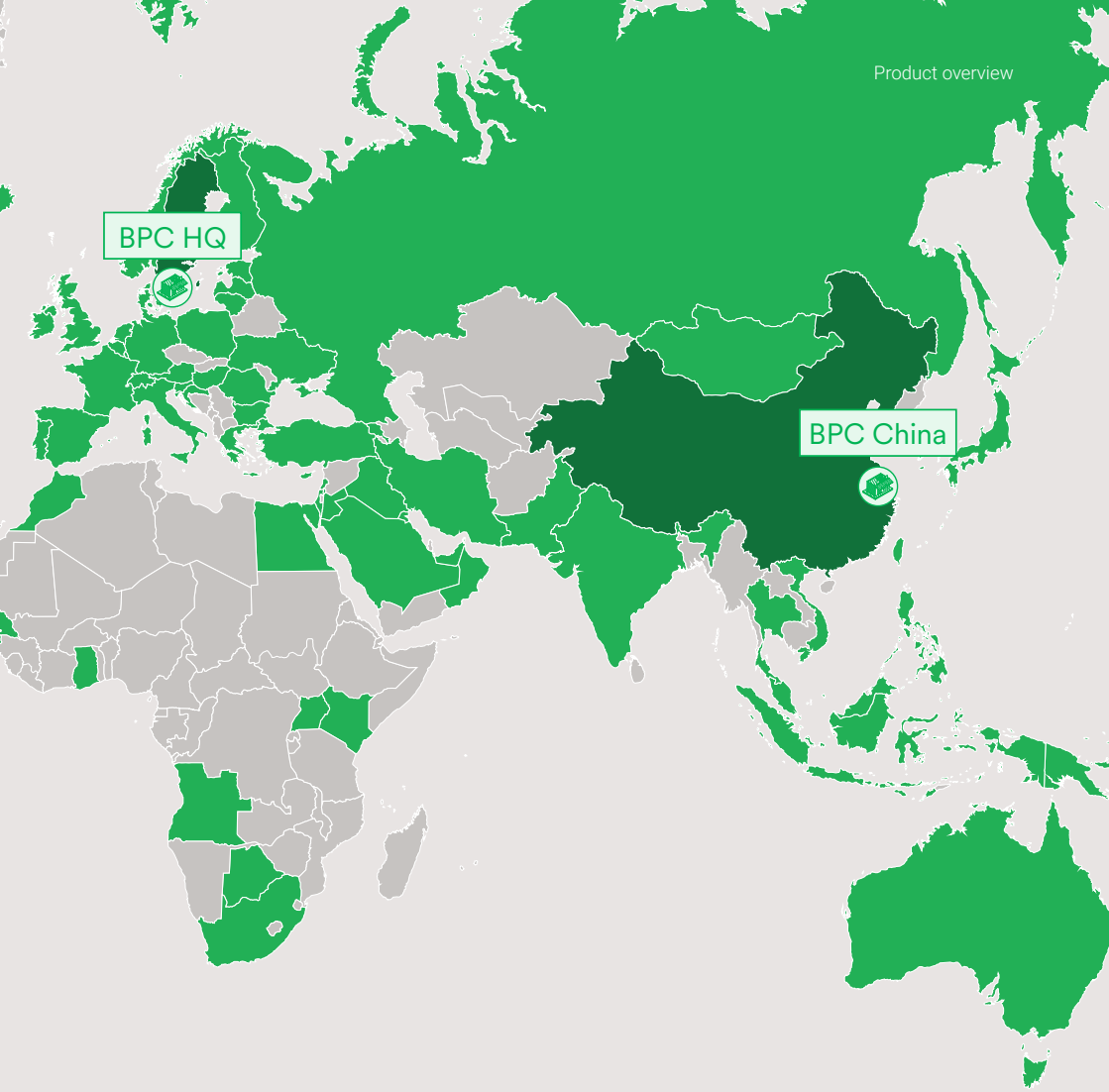
Trusted by researchers and industry professionals in nearly 80 countries, our instruments streamline testing, reduce manual work, and deliver precise, standardised results.

General product catalouge
Ver. 2025-0801.



**BPC Instruments continuously complies with applicable export control laws and regulations, including those issued by the European Union.*

Global reach, Scandinavian roots



Designed and manufactured in Sweden, our instruments reflect the precision and functionality of Scandinavian design. With a presence in nearly 80 countries, BPC Instruments supports leading research and industrial processes within biogas, biodegradability and animal nutrition. Through our network of partners in 14 countries we provide local expertise in a global context.

77

Countries shipped to, partners in 14.*

Biogas

Understanding feedstock characteristics and optimising anaerobic digestion (AD) processes are key to improving biogas production. Our instruments provide real-time measurement of gas flow and volume, helping both researchers and industry professionals assess feedstock performance, methane potential, and process stability with precision.

Designed for both laboratory and pilot-scale applications, our solutions support feedstock characterisation, AD process optimisation, and efficiency improvements in renewable energy and waste management.

By automating gas data collection and standardising analysis, we reduce time, labour, and skill demands while delivering reliable results.

For others it’s waste, for you it’s money. Why waste it?

AMPTS® III

Article No. 21-0000-01 AMPTS III | 22-0000-01 AMPTS III Light

A tool for anaerobic batch fermentation tests

The Automatic Methane Potential Test System (AMPTS®) is an advanced analytical instrument for measuring biochemical methane potential (BMP), biogas production, and anaerobic biodegradability. Trusted by scientists and engineers worldwide, it is valued for its accuracy, automation, and ease of use.

Now in its third generation, AMPTS® III is fully integrated for sampling, analysis, recording, and report generation. It comes in two models: AMPTS® III, which houses 18 glass reactors, and AMPTS® III Light, a compact version with 9 reactors. Both models support a wide range of applications, including BMP tests, specific methanogenic activity (SMA) assays, and residual gas potential (RGP) analyses.

By automating complex testing processes, AMPTS® III ensures reliable, standardised, and high-quality results with minimal manual effort, saving both time and resources.

Web-based	No installation needed. Access AMPTS® from any device via a web browser.
Automated	Real-time compensation for pressure, temperature, and moisture.
Multiplexing	Run batch analyses simultaneously with different start-up times for greater efficiency.

BPC® Air

Article No. 26-0000-01

An incubator with cooling and heating in one

BPC® Air is a versatile incubator designed for both heating and cooling, offering low energy consumption, minimal maintenance, and flexible placement within the lab. Its user-friendly design allows for quick setup and effortless operation, making it an ideal solution for microbial incubation.

Capable of holding up to 18 bottles of various sizes (0.5, 1, and 2 litres), BPC® Air operates within a temperature range of 10°C to 60°C, perfect for microbial studies at typical indoor temperatures. Its exceptionally low energy consumption reduces its carbon footprint compared to conventional air incubators and water baths. When paired with a regular UPS, it maintains stable incubation conditions even during power outages or relocation.

With a floor-standing design and built-in wheels, BPC® Air offers effortless mobility and flexibility, making it easy to position anywhere in the lab.

Compatible	Works effortlessly with BPC Instruments' respirometers for a complete testing setup.
Versatile	Provides both heating and cooling without additional accessories.
Efficient	Operates with less energy, lowering costs and environmental impact.

Bioreactors

Article No.

06-0000-01	BPC® CSTR-5G
07-0000-01	BPC® CSTR-5S
08-0000-01	BPC® CSTR-10S
15-0200-01	BPC® IC-20 S
15-0100-01	BPC® UASB/EGSB-20 S

Simulate biogas production processes with minimal effort

Our modular CSTR and high-rate anaerobic bioreactors provide a reliable platform for simulating anaerobic fermentation at laboratory scale. Built from high-quality, corrosion-resistant stainless steel, they are durable, easy to assemble, and require minimal maintenance.

Available in three CSTR sizes (2, 5, and 10 litres) and glass (G) or stainless steel (S) configurations, these bioreactors can operate standalone or in series. A robust tri-clamp system ensures airtight anaerobic conditions, while the self-discharging port with automatic slurry level control supports both low- and high-solid feedstocks.

For high-rate anaerobic digestion, we offer UASB / EGSB-20S and IC-20S configurations, designed for long-term operation. All bioreactors are fully compatible with the BPC BioReactor Simulator (BRS III) and BPC® Go for precise gas flow measurement.

Durable	Resistant to leakage and corrosion for long-term reliability.
Modular	Flexible design for easy customization and scalability.
Accessible	Simple to operate, maintain, and adapt to different research needs.

BRS III

BioReactor Simulator

Article No.

23-0000-01	BRS III
23-0201-01	BPC Core BRS III
23-0500-01	BRS III DUO

Simulate biogas production processes with minimal effort

BRS III is a laboratory-scale instrument designed to replicate continuously fed anaerobic fermentation processes with full automation, user-friendly operation, and reliable performance. Featuring nine parallel channels, it allows simultaneous testing of multiple process conditions, making it a powerful tool for optimising biogas production.

By simulating real biogas plant operations on a smaller scale, BRS III enables users to test different loading regimes, feedstock mixtures, pre-treatment methods, and additives without risking downtime or financial loss. It also provides insights into the long-term impact of process adjustments, helping to fine-tune operations before full-scale implementation.

With its precise data collection and intuitive design, BRS III supports confident decision-making, reducing risks and optimising efficiency in biogas production.

Accurate	Pre-calibrated for precise measurements without frequent calibrations.
Steady	Simple CSTR setup with easy feeding and discharging solutions.
Adaptable	Easily adjusts to different reactor configurations.

BPC® Titan

Article No. 27-0000-01

High-volume gas flow measurement for microbial fermentation

BPC® Titan is an advanced analytical instrument designed for real-time online monitoring of fermentation processes with high gas throughput. With a broad linear detection range up to 360 L/h and a resolution of 1.5 L, it delivers precise and accurate gas measurements across large flow rate intervals. Built as an enhanced version of BPC® Go, it offers the same advanced features with an extended measurement range, making it ideal for both research and industrial applications.

Designed for both batch and continuous processes, BPC® Titan simplifies gas flow and volume measurement at large lab and small pilot scales. Its pre-calibrated system provides optimal precision, while automated operation reduces time and labour demands. Standardised measurements, data handling, and reporting provide reliable results, all managed through an intuitive web-based interface for real-time monitoring and control.

Standalone	Operates independently without external computers or additional data acquisition units.
Accurate	Equipped with an accelerometer and adjustable feet for accurate leveling.
Intelligent	An advanced algorithm prevents over- or underestimation of gas flow and volume.

Biodegradability & Compostability

Accurate biodegradability assessment requires precise measurement of gas production under controlled conditions. Our instruments streamline aerobic and anaerobic biodegradability testing by continuously monitoring gas flow and volume, providing real-time data on material breakdown. Fully compliant with key ISO, European, and American standards, they automate complex processes, minimise manual effort, and deliver reproducible, high-precision results.

Designed for researchers and industry professionals, our instruments make biodegradability testing more efficient, standardised, and accessible.

BPC® Blue

Article No.

24-0000-01	BPC Blue Anaerobic (1.0 l)
24-0000-02	BPC Blue Aerobic (1.0 l)
24-0000-03	BPC Blue Premium (1.0 l)
24-0500-01	BPC Anaerobic (1.0 l) DUO
24-0500-02	BPC Blue Premium (1.0 l) DUO

The ultimate choice for material biodegradability assessment

BPC® Blue is a state-of-the-art instrument for assessing the aerobic and anaerobic biodegradability of plastics and polymers under simulated environmental conditions. Fully compliant with key ISO, European, and American standards, it delivers reliable, standardised results for research and industry.

With 18 or 9 channels and multiple reactor volume options, BPC® Blue tests various sample sizes simultaneously, saving time and costs. Setup takes just 2–3 hours before the instrument automates sampling, analysis, recording, and report generation. Its pre-calibrated system ensures precise measurements, while intuitive software calculates and presents biodegradability in real time.

Automation, accuracy, and flexible reactor volumes enable efficient, reproducible testing with minimal manual effort, allowing users to focus on analysis.

Accessible	No installation needed. Access BPC® Blue from any device via a web browser.
Automated	Real-time compensation for pressure, temperature, and moisture.
Adaptive	Analyse multiple samples simultaneously with different start times.

Animal Nutrition

Optimising feed formulation starts with understanding how nutrients are broken down and absorbed. Our instruments enable precise in vitro digestibility studies, providing real-time data on gas production, microbial activity, and fermentation dynamics. With fully automated operation, they minimise manual work while delivering high-quality, standardised results.

By replicating digestive processes under controlled conditions, our solutions help researchers and industry professionals evaluate feed efficiency, nutrient availability, and methane emissions, supporting more sustainable and effective animal nutrition strategies.

By replicating digestive processes in a controlled environment, in vitro analysis provides a fast, reliable, and ethical approach to evaluating feed digestibility and nutrient efficiency.

Gas Endeavour® III

Article No.

28-0000-01	Gas Endeavour III Standard (0.5 l)
28-0000-02	Gas Endeavour III Standard (1.0 l)
28-0000-03	Gas Endeavour III Animal Nutrition
28-0500-01	Gas Endeavour III DUO (1.0 l)
28-0600-01	Gas Endeavour III MAX (1.0 l)
29-0000-01	Gas Endeavour III Standard Light (2.0 l)
29-0500-01	Gas Endeavour III Light DUO (2.0 l)

For batch and continuous microbioassays

Gas Endeavour® III is a high-precision laboratory instrument for measuring gas production and consumption in batch and continuous processes. Fully automated and user-friendly, it delivers accurate, reliable results for research and industry.

Available in an 18-channel standard edition and a 9-channel Light variant, Gas Endeavour® III offers seven configurations, including options for different flask sizes, Animal Nutrient, DUO, and Max packages. Its versatility makes it ideal for applications such as animal nutrition studies, wastewater analyses, ethanol fermentation, hydrogen production, and microbial activity assessment.

With advanced automation and flexible configurations, Gas Endeavour III helps users optimise processes with confidence and precision.

Independent	Calibration-free operation for hassle-free maintenance and consistent performance.
Scalable	Multiplexing capability allows simultaneous batch analysis with different start-up times.
Comprehensive	Real-time measurements enable continuous monitoring of multiple gas types.

Universal

Some research demands versatile solutions. Our universal instrument, BPC Go, BPC Core, and BPC Move, are designed for precise gas volume and flow measurements across a wide range of applications. Whether used in biogas research, biodegradability testing, wastewater analysis, or microbial studies, they deliver accurate, real-time data with minimal manual effort.

With modular designs, automation, and broad compatibility, these instruments adapt to different experimental setups, making them the go-to choice for researchers and industry professionals needing reliable gas analysis without limitations.

Designed for flexibility, our universal instruments provide precise gas analysis across multiple research fields, wherever accuracy and reliability matter.

BPC® Core

Article No.	28-0301-01 BPC Core	29-0301-01 BPC Core Light

Effortless operation, maximum convenience

BPC® Core is a self-contained gas volume and flow meter array designed to monitor up to 9 or 18 parallel gas streams with exceptional accuracy. Its integrated data acquisition and processing system allows it to operate independently, eliminating the need for a computer or external devices. Real-time measurements can be accessed remotely from any smart device with a web browser, offering convenience and flexibility.

Built for both research and industrial applications, BPC® Core is ideal for biogas production, animal nutrition studies, wastewater analyses, ethanol and yeast fermentation, biohydrogen production, greenhouse gas emissions, and microbial activity evaluation. Its precision and versatility make it a powerful tool for laboratories and industries seeking reliable gas measurement solutions.

Connected	Access BPC Core remotely or locally from any device via a web browser.
Precise	Real-time pressure, temperature, and moisture compensation for accurate measurements.
Adaptive	Operates in both batch and continuous modes with dual measurement resolutions.

BPC® Go

Article No. 17-0000-01

Simplify and secure low gas volume and flow measurements

BPC® Go is a next-generation gas volume and flow meter with an in-built computer for simplified, secure, and highly accurate low gas flow measurements. It automatically measures both wet and dry gases at laboratory scale without requiring recalibration. Designed to the highest Scandinavian quality standards, it is easy to set up and allows real-time online monitoring from any location.

BPC® Go normalises gas flow rates and volume measurements at 0˚C and 1 atm, with the option to measure wet or dry gases by including or excluding water vapour contributions. Real-time temperature, pressure, and humidity compensation guarantee precise and reliable measurements.

With a wide detection range, it supports flow rates up to 1500 ml/h with a 2 ml flow cell and up to 6000 ml/h with a 9 ml flow cell, ensuring accuracy across various applications.

Smart	Embedded microcontroller secures measurements and data acquisition.
Versatile	Measures from 0.2 ml to 6000 ml/h with two resolution options (9 ml and 2 ml).
Accessible	View standardised results and monitor experiments remotely from any device.

BPC® Move

Article No. 220-0002-01

Reliable and efficient mechanical mixing for laboratory applications

BPC® Move is a compact standalone mechanical agitator for reliable mixing, dispersion, and dissolution of particle-free solutions and slurries. Combining the strength of mechanical agitation with the ease of magnetic stirring, it offers a superior alternative to traditional stirrers.

Unlike magnetic stirrers that struggle with weak mixing or displaced magnets, BPC® Move provides stable and precise agitation. With an integrated bottle cap and motor-holder for top mounting on standard GL45 flasks, it blends the best aspects of magnetic stirrers and overhead mixers.

Instead of a stirring bar or propeller, BPC® Move uses a flexible agitation tube with a stainless steel rod, enabling smooth clockwise and counterclockwise rotation. Driven by a brushless step motor, it delivers strong yet controlled agitation, eliminating uneven mixing and unstable movement.

Precise	Intuitive control with an OLED display and a multifunctional knob for fine-tuned agitation.
Stable	Strong, reliable agitation without magnets, eliminating the risk of irregular spin.
Versatile	Supports various mixing movements and works in both open and closed systems.

Customer training

Beyond providing analytical tools, BPC Instruments shares expertise in biogas, biodegradability, and fermentation processes, adding value through specialist knowledge.

As part of our knowledge transfer, we offer all customers a training course covering basic operation and data processing. This helps users understand different applications, how the instruments work, and how to maximise their potential. In addition to training, we provide resources such as handbooks and videos to further support customers in operating and optimising their instruments.

»Thank you for the well-organised training. I've gained new ideas for improving our AMPTS analysers. It was great meeting everyone, and I loved visiting Lund—what a beautiful place!«

– Mr. John Hunt,
Rothamsted Research, UK

Our team

At BPC Instruments, our team is committed to providing friendly, knowledgeable support for our technical products. With extensive expertise and hands-on experience, we respond to customer requests with both skill and dedication, providing a seamless service experience.

With a global presence, we deliver high-quality products and support for sales, maintenance, and applications. For assistance, visit our website or contact us directly.

Product enquiries
sales@bpcinstruments.com

General and technical support
support@bpcinstruments.com

BPC INSTRUMENTS

Smart instruments for smart people

BPC Instruments is a Swedish technology company providing analytical instruments for efficient, reliable, and high-quality research in renewable bioenergy and environmental biotechnology. Our solutions enhance accuracy while reducing time and labour, combining advanced hardware and software with deep industry expertise. Exporting to nearly 80 countries, we empower researchers and professionals with smart instruments.

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