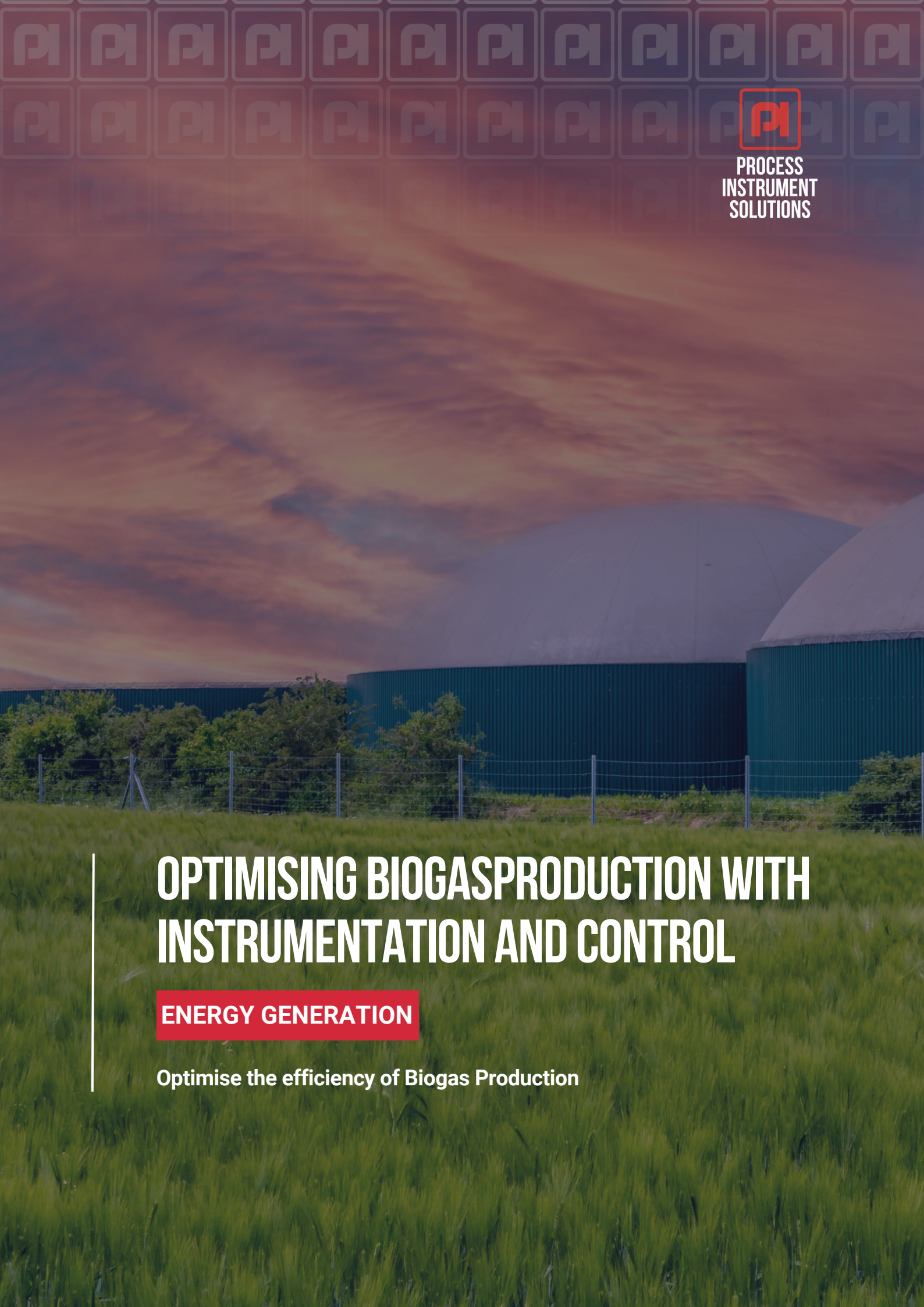


PROCESS
INSTRUMENT
SOLUTIONS

OPTIMISING BIOGASPRODUCTION WITH INSTRUMENTATION AND CONTROL

ENERGY GENERATION

Optimise the efficiency of Biogas Production

About Us

Process Instrument Solutions is a specialist instrumentation and system integration company with a wealth of experience in the supply, installation, commissioning and support of biogas plant measurement and control systems.

The Right Choice

Pressure, temperature, flow, level, liquid and gas analysis must be monitored at various locations in a biogas plant. The correct choice of instrumentation and analytical systems influences both the efficiency and life-span of the plant.

Who We Work With

Technical partners for leading manufacturers including Siemens, Burkert, Labom, Fox and Hach; Process Instrument Solutions offers a comprehensive portfolio of industry-aligned solutions covering all requirements and budgets, from project development to installation, commissioning and support.

Site Engineering Services

Process Instrument Solutions not only supply your instrumentation but we will also expertly install, commission, calibrate and service the products whether initially sourced through us or already installed at your plant. We provide CompEx trained professional technicians and engineers with extensive knowledge, supported by high-precision equipment and instrumentation and championed by our world- leading partners.



Unit 6/7, Parkway, Elm Farm Park,
Thurston, Bury St Edmunds,
Suffolk IP31 3TB

Tel: 01449 674986
Fax: 01449 833 007
Email: solutions@pi-team.co.uk

Connect with us
www.processinstrumentsolutions.co.uk

Project Scoping & Analysis	Effective measurement is essential for operational efficiency and ROI in biogas production, whether for a new plant or optimising an existing one. With extensive experience, we assess requirements and provide reliable, maintainable measurement systems that ensure long-term accuracy.
System Selection & Integration	Efficient biogas production from wastewater, landfills, or feedstocks needs comprehensive measurements of biogas concentrations, temperatures, pressures, and moisture. We integrate advanced solutions to effectively measure water levels, CH4, and CO2, which are essential for biogas production.
Installation & Commissioning	We specialise in installing, commissioning, and troubleshooting instrumentation and control systems. From replacing flow meters to providing complete biogas measurement solutions, we emphasize a global understanding of the project to meet your process goals.
Monitoring & Support	We recognise the impact of instrumentation failure. Our products offer long-term stability with minimal maintenance, and our customer care team provides support through our service engineers or the original manufacturer.

Biogas Measurement Challenge

Whether you are manufacturing biogas for use in CHP plants or for direct supply into the gas grid, effective measurement underpins operational efficiency and ROI, optimising methane content is crucial to economic biogas production. Oxygenation, temperature, pressure and moisture all affect methane production; as does fermentation material, feed and stirring rates.

The variety of measurements required and the testing environmental conditions poses many challenges. The instrumentation not only needs to be corrosive resistant, it also needs to make adjustments for the high water and carbon dioxide content that have historically made biogas a demanding medium to measure. A new generation of flow meters specifically designed for optimal performance in biogas production are revolutionising the accuracy, stability and complexity of biogas measurement.



Biogas Measurement Solutions

As measurement and automation experts, we work closely with our biogas clients from project inception to installation, commissioning and full life cycle support. We deliver efficient, sustainable and cost-effective solutions that add quantifiable commercial value to biogas production.

Fox Thermal FT1

"Measuregas flowrate instandardunits with no temperature & pressure compensation."

The award-winning Fox Model FT1 Thermal Gas Mass Flow Meter measures gas flow rates in standard units without needing temperature and pressure compensation. Its DDC-Sensor™ technology utilises the Gas-SelectX® tool for gas selection.

Users can also configure the FT1 using the free FT1 View™ software on a PC. The Gas-SelectX® feature allows for selecting ideal gas mixture percentages.



Siemens Ultramat 23

Unleash the Power of Biogas Analysis with Siemens ULTRAMAT 23 Extrative Gas Analyser!

The Siemens ULTRAMAT 23 Extrative Gas Analyser can revolutionise biogas monitoring, offering precision, reliability, and cost-efficiency like never before. The ULTRAMAT 23 can monitor and optimise biogas processes effortlessly.



Up to four gas components can be measured continuously: two infrared-sensitive gases (CO2 and CH4), plus O2 and H2S with electrochemical measuring cells.



Siemens Sitrans LR200

Harness the power of radar technology to precisely monitor biogas levels like never before, with Siemens SITRANS LR200 Radar Transmitter!

Siemens SITRANS LR200 is a 2-wire, 6 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in process vessels including high temperature, pressure, agitation, and turbulence to a range of 20 m (65 ft).



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