INDUSTRY SOLUTIONS

Empowering Smarter Industrial Operations

Keeping industrial sites powered, monitored and operational 24/7.



Your partner for resilient industry



Engineering power, control & monitoring for industrial sites

Alpha Innovations develops and manufactures custom power solutions, monitoring platforms and integrated systems for industrial sites, utilities and other mission-critical infrastructures. As a specialist in complex energy, control and communication systems, we help operators improve reliability, availability, energy efficiency and operational performance.

Our expertise combines power electronics, software, monitoring, control systems and integration capabilities to deliver complete solutions tailored to each application. From backup power for sensitive process equipment to smart energy management of PV panels, batteries, EV chargers and co-generation assets, we transform complexity into reliable operational solutions.

Our mission is simple

To keep your operations running with smart, reliable power solutions that protect and optimize your assets.

Why choose Alpha Innovations?

Local agility. Global strength.

Alpha Innovations is part of the CE+T Group, an international technology group specialized in energy conversion, power electronics, BESS, monitoring, and energy management solutions. Founded in Belgium in 1934, CE+T has become a recognized global player delivering innovative energy solutions across critical industries worldwide.

Today, the group combines decades of engineering expertise with a strong innovation culture driven by research and development.

- €99 million consolidated turnover
- Approximately 400 employees worldwide
- 7 R&D centers
- 6 production sites
- More than 90 active patents
- International presence across Europe, America, Asia, the Middle East, and Australia

The strength of the group

Being part of CE+T Group gives Alpha Innovations access to a powerful ecosystem of complementary technologies.

Innovation-driven

More than 90 active patents and continuous investment in next-generation technologies.

Industrial expertise

Proven experience in backup power and UPS systems, harsh-environment cabinets, co-generation and building energy monitoring, and multi-site energy asset management.

Long-term partnership

Financial strength, manufacturing capacity, and worldwide support capabilities ensure sustainable customer relationships.

One ecosystem

The combined expertise of CE+T Power, JEMA, RIPEnergy, CE+T America, and Alpha Innovations enables the delivery of complete solutions from energy conversion to advanced monitoring and control.

Solutions for industrial critical power

Predictive maintenance

Detect early signs of failure in batteries, inverters and critical equipment thanks to our COMPAS and Inview MESH software tools, ensuring maximum uptime, reliability and cost optimization.



Backup power for critical processes

Custom-engineered UPS and backup power systems that keep sensitive equipment running through grid failures, fluctuating loads and harsh environments.

Power and control cabinets

Designed to meet your specifications, our complete power and control cabinets ensure reliable and efficient operation of your industrial assets.



Energy optimization & microgrids

Centralized monitoring and control of PV panels, batteries, EV chargers and co-generation assets to cut consumption, peak charges and carbon footprint.

From data collection to energy optimization

Industrial sites generate vast amounts of operational data every day, from production equipment and utilities to PV panels, batteries and EV chargers. The challenge lies in transforming that data into actionable insights.
With COMPAS at the edge and Inview MESH in the cloud, Alpha Innovations gives operators complete visibility over their energy assets and improves decision-making in real time.



Our solutions enable customers to :

- Centralize data from multi-vendor energy assets
- Monitor consumption and production in real time
- Detect anomalies and inverter faults early
- Automate peak shaving and load control
- Export dashboards and compliance reports
- Reduce energy and operating costs

Intelligent monitoring at the edge

Our edge solutions are designed to operate in demanding industrial environments and provide real-time access to critical operational information, even without internet connectivity.

MODULAR | SCALABLE | BIDIRECTIONAL | REAL-TIME

MCU Oled



- 1U fits in 19" rack
- CAN, Ethernet, USB host & device extension

UCC



- 1U, 19" rack form factor
- CAN - RS485/232 - USB-A/B + ADIO cards

GALEO



- DIN Rail form factor
- Based on a Raspberry Pi
- Standard connectivity

One cockpit for all your energy assets

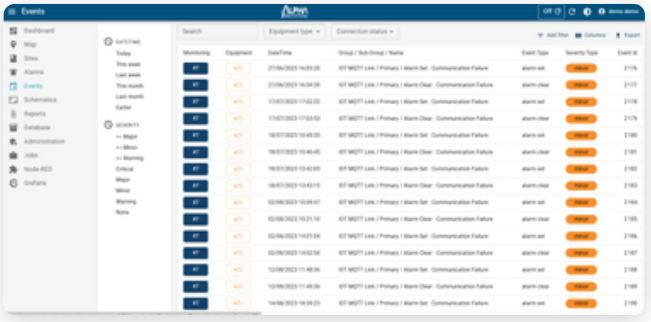
Industrial energy producers often face a recurring challenge: solar, batteries, steam and gas turbines and wind assets come from different brands, each with its own system. Managing several incompatible platforms leads to blind spots, complex integrations and costly, inefficient operations.
A leading Dutch energy supplier needed one real-time view and central control of its entire co-generation infrastructure.

Co-generation optimization starts with better insights

COMPAS and **Inview MESH** form a flexible technical backbone. COMPAS, an open, protocol-agnostic industrial IoT gateway, collects data and runs site-specific automation; Inview MESH centralizes multi-site monitoring and management in the cloud.

CONNECT | MONITOR | CONTROL | AUTOMATE

The solution gathers real-time data from building management systems (BMS), solar inverters and other sources, and provides direct control of steam, gas and wind turbines. Existing systems are connected through API integration, and custom features such as 4G connectivity bring remote sites online. Site-specific automation and control logic can be added through custom Python scripts, adapting the platform to the constraints of each installation, whatever the equipment brand or technology.



Complete visibility

All co-generation assets, sites and data sources in one single platform, in real time.

Reduced complexity

No more juggling separate systems: centralized control without multiple integrations.

Open integration

Multi-brand, multi-technology support with API integration into existing tools.

Future-proof scalability

A scalable architecture that grows with new assets and adapts to site constraints.

Integrated power & control solutions

Integrating complexity. Delivering reliability.

Our engineering teams design and manufacture customized power and control cabinets tailored to the specific operational requirements of industrial projects worldwide.
Engineered for process equipment, energy infrastructure and critical utilities, our cabinets are built to ensure maximum availability, safety and performance, even in harsh environments.

Proven industrial integration expertise

Our cabinets combine power conversion, AC/DC distribution, battery backup systems, communication gateways, monitoring devices and control systems within a single robust platform. They are engineered to power, supervise and protect critical assets such as magnetic bearings, co-generation installations, building energy systems and grid phase-balancing equipment.
Each solution is custom-designed, assembled and tested in Belgium (functional, thermal, safety and EMC tests) to ensure seamless integration, maximum availability and long-term reliability.

- Power conversion & UPS backup power
- Protection & energy distribution
- Harsh-environment design (IP55, tropicalized PCBs, shock & vibration)
- Battery management & automated battery tests
- Integrated monitoring and diagnostics
- Third-party equipment integration

Industrial integration project

UPS cabinet 300Vdc – offshore oil & gas

Together with the R&D team of a magnetic bearing manufacturer, we co-developed a compact, modular UPS cabinet integrated into the bearing control cabinet of isolated offshore production stations. Our solution ensures:

- Safe rotor shutdown, without destructive friction
- Isolated maintenance, without full shutdown

Fewer offshore logistics trips mean lower operating costs.

When the grid fails

If power is lost while the rotor spins at high speed, the shaft can drop onto its bearings, causing friction, heat and possible motor destruction.

t = 0
Grid failure — the UPS takes over instantly at 300 Vdc.

≈ 2 minutes
Power lines are checked. Most outages last less than 2 minutes.

≈ 3 minutes
If the outage persists, the rotor slows down safely.

5 – 10 min
of backup, depending on configuration.

300 Vdc UPS output
Stable DC supply for the magnetic bearing system, at least as available as the motor itself

Internal batteries
5 to 10 minutes of backup time, configurable to the application

Dedicated UPS controller
Communicates continuously with the bearing controller

Independent maintenance
Interventions on one side without affecting the other

Compact & modular design
Integrated into the bearing control cabinet, configurable per site

Low maintenance
Fewer costly trips to remote, hard-to-reach offshore sites

Predictive monitoring
Load analysis to detect faults before a shutdown occurs

Industrial energy expertise

Proven on our own industrial site

After installing rooftop solar panels and an 80 kWh battery at its production site in Louvain-la-Neuve (Belgium), Alpha Innovations deployed its own **COMPAS** and **Inview MESH** ecosystem to keep the system efficient.
COMPAS connects sensors and equipment via standard protocols such as Modbus and MQTT, measuring PV output, facility-wide and zone-level electricity, gas and water consumption. Inview MESH aggregates the data into real-time and historical dashboards, alerts and exportable reports supporting energy tracking, peak shaving and CSRD reporting.

✓16%

reduction in electricity consumption

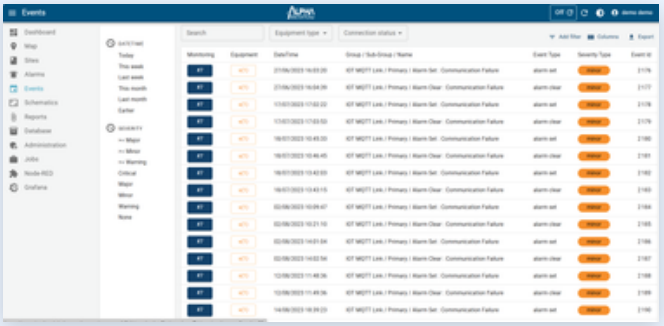
✓40%

reduction in gas consumption

✓€4,000

financial savings per year and 3.6 t less CO_2 emissions





Three pillars of a smarter site

- **Measure everything**

PV production, battery state, electricity, gas and water consumption, from the whole facility down to individual zones.

- **Control automatically**

Safe battery charging and timely discharge, factory lighting, stock-area heating and EV charging schedules, with early inverter fault detection.

- **Report with confidence**

Real-time and historical dashboards, alerts and exportable compliance reports for CSRD and carbon footprint tracking.

Other use cases & news

USE CASE



Customer : Magnetic bearing manufacturer (Oil & Gas)
Application : On-board magnetic bearing protection for ships
Environment : Marine vessels
Expertise : IP55 marine UPS cabinets, tropicalized PCBs, shock absorbers

POWER MODULES

USE CASE



Customer : Interparking
Application : Turning parking lots into energy hubs – EV charger load balancing
Country : Several European countries
Expertise : COMPAS edge control, MESH cloud, GALEO

MONITORING

USE CASE



Customer : Distribution System Operators
Application : Automatic grid phase balancing
Country : Belgium
Expertise : Power & Control cabinet, CE+T Sierra 25 bidirectional converter, Inview MESH

POWER & CONTROL CABINETS

NEWS · MARCH 2026



ISO 9001 certification renewed

Alpha Innovations renewed its ISO 9001 Quality Management certification, covering its power conversion systems and monitoring solutions. Every solution undergoes functional, thermal, safety and EMC testing before leaving production.

COMPANY NEWS

NEWS · OCTOBER 2025



From ARMADA to Inview MESH

Our energy asset management platform becomes Inview MESH: one multi-vendor cockpit to monitor and control solar inverters, batteries and EV chargers across all your sites, proven at the scale of thousands of devices.

PRODUCTS

NEWS · 2024



Factory of the Future label

Alpha Innovations was one of ten Belgian companies awarded the Factory of the Future label, recognizing its commitment to sustainable processes, advanced digital technologies and employee empowerment.

COMPANY NEWS



ALPHA INNOVATIONS

CONTACT US

Address
Avenue Alexander Fleming, 1
BE -1348 Louvain-la-Neuve

Email
rfq@alphainnovations.eu

Website
www.alphainnovations.eu