



PATHION ALWAYS-ON CRITICAL OPERATIONS PLATFORM



ALWAYS-ON INFRASTRUCTURE: ENERGY & WATER

Operations leaders at commercial and industrial sites, government centers, community developments, care facilities, and remote field sites share a fundamental need. They must assure always-on service across their essential infrastructure for the safety, security, health, and livelihood of all who rely on their site's continuous operation. Critical operations depend on Always-On energy to ensure reliable power and fuel supply, and clean and safe water supply. Site leaders often procure these solutions separately, from different vendors with different designs and protocols that prevent smooth and efficient interoperability – limiting site functionality and future expansion options.

PATHION's Always-On Critical Operations Platform is a comprehensive solutions and services suite, delivering renewable energy management and storage, water purification, wastewater treatment, and biological waste-to-fuel technology solutions, along with the expertise to design, integrate and deliver these essential solutions as a single optimized system.



CORE TECHNOLOGIES IN THE PLATFORM:

The PATHION Always-On Critical Operations Platform comprises three main components: the DirectCore™ control system; our suite of top-tier technologies spanning power and water needs; and the relationship and services we deliver to ensure a single optimized system. DirectCore™ is a real-time decision-making engine incorporating machine learning, forecasting, and operational intelligence to optimize the control of each aspect of the system. The DirectCore™ system is fronted by a user-interface portal featuring a customer dashboard, customized data reports, and event scheduling. Our Critical Operations Platform is comprised of the following energy and water solutions:

ENERGY

ENERGY MANAGEMENT SYSTEM

Our Always-On energy generation, storage and management solutions are controlled by our DirectCore™ Control System. DirectCore™ serves as the “central nervous system” of our energy solutions stack, ensuring locally produced energy is used in concert with grid energy to both save and earn you money on your energy operations.

ENERGY STORAGE

PATHION covers mission-critical energy storage needs across fixed and remote sites under a wide range of operating conditions. Our energy storage technologies include stationary battery storage systems, portable battery storage systems, and a flywheel kinetic energy storage system.

ENERGY GENERATION

PATHION integrates with and optimizes the broadest range of energy generation sources, from solar panels to wind turbines, biomass and combustion engine generators. We also manufacture compact, powerful wind turbines and offer a waste to gas solution.

TRANSPORTATION

PATHION delivers innovative transportation solutions for road and marine fleets, such as hybrid and full electric conversion kits, as well as the charging station networks to keep other electric vehicles powered up.

PUTTING IT ALL TOGETHER

PATHION establishes a partnership with each customer centered on learning our customers’ goals and designing solutions that best achieve those goals. As we define and prepare the integration plan, we take into account the available programs, incentives, and other opportunities available for the customer, ensuring that the plan will comply with and take advantage of the relevant benefits. And we help customers finance their upgrades through a variety of methods including leases and PPAs (Power Purchase Agreements).

PATHION is heavily engaged in the critical infrastructure industries through participation with the balancing authorities, standards groups, and policy initiatives from federal, state, county, and municipal leaders. These ongoing efforts keep us well positioned to enact change for the benefit of our infrastructure, and for our customers’ critical operations solutions.

ONLY PATHION SOLUTIONS CAN DO THIS:

- Integrate your critical infrastructure into a resilient system that serves your energy and water needs
- Seamlessly incorporate third party subsystems into our open-architecture platform
- Inform you of potential optimizations to your operations before installation, and over the full project lifespan
- Support the integration with DirectCore™, the highest efficiency energy storage solution on the market – 8% more energy utilization than any competitor.

How can we help you?

PATHION works closely with our customers to define their critical problems and find the best solutions, including offering insight on operations and processes both before or as part of a critical water and/or energy system upgrade. We then continue to support our customers throughout the life of the facility. Visit <https://pathion.com/contact/> to schedule an evaluation.

WATER

WATER PURIFICATION

We combine several purification processes, starting with 5-micron and 1-micron filtration to remove any parasites; a proprietary formula of multi-media components and UV that eliminate hazardous chemicals more effectively than chlorine or carbon filtration.

DE-SALINATION

Our innovative Saltwater Purification Process based on filtration systems that capture salt and can handle saltwater removal at concentrations of tens of thousands of PPM. Our de-salination systems can be used stand-alone, or can be paired with our water purification systems.

WASTEWATER TREATMENT

The PATHION wastewater treatment system utilizes the extended aeration method of sewage treatment that involves five separate operations on untreated wastewater to ensure clean effluent that can be released at or above local standards or further purified for reuse.

INDUSTRIAL WATER RECYCLING

Our treatment and recycling process cleans wastewater, mine tailings, and other industrial effluent, resulting in reusable water and recapture of desired elements from the water. Our rigorous treatment process ensures the resulting clean water won't damage your machines or generate penalties if discharged.