ADVANTAGES AT A GLANCE



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Quality, reliability and uptime

Pixii systems deliver over 99% availability through modular redundancy and hot-swappable components that keep operations running without downtime.

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Always on - No single point of failure

Proven system availability > 99.x%, thanks to modular inverter and battery design with a 48V parallel architecture.

Component faults have minimal impact – less than 10% reduction in output (power or capacity)

Fast swap, zero downtime

Hot-swappable, plug-in components and interchangeable inverters allow service during operation. Critical spare parts are strategically stocked in Europe.

Redundancy by design

Only minimal oversizing is required to secure critical applications - keeping the system efficient and cost-effective.

Proven track record

More than 300 MW of systems installed worldwide, robust Norwegian engineering, European production, ISO-certified operations, and compliance with a broad range of international safety and performance standards.

Efficient and low-maintenance cooling

Fan/filter cooling keeps cabinets cool without high overhead. Fewer components to service, less downtime Annual service during operation: simple filter change and connection check.

Quiet operation and built-in noise control

Low-noise fans keep sound levels >66 dBA at 1m. High fan speeds only required in rare high-load conditions.

97% efficiency, safe operation

48V architecture delivers slightly lower efficiency (<97%) but provides galvanic isolation, improving overall safety.

In applications like peak shaving and energy trading, uptime and availability matter more than small efficiency gains.

Independent operation

The system runs without cloud access, with the cloud used only for service support and maintaining guarantee.

Realistic performance guarantee

7,600 cycles at 0.5C (200 kWh) – 2 cycles per day for 10 years. Transparent warranty ensures predictable, reliable performance.

Competition

Vulnerable to single-point failures and downtime

Central inverter with series-connected batteries and a single central BMS.

Failure of the inverter or one battery can shut down the entire system.

Repairs are complex and often result in long downtimes.

Limited access to critical spare parts leads to longer outages and higher operational costs. Realistic uptime is often below < 90%

Limited track record

Smaller or less established install base, often relying on pilot projects or regional deployments often limited compliance to relevant standards.

Complex liquid cooling adds downtime

Frequent maintenance of fluid circuits is required. Risk of leaks leads to extra downtime and cost.

Disruptive noise levels

Central fan designs (container systems) often produce >80 dBA at 1m.

98.5% efficiency at the cost of uptime

High-voltage architecture delivers up to 98.5% efficiency - but a single point of failure can cause extended downtime.

Constant connection required

Continuous cloud access for operation and monitoring, which can reduce flexibility in sites with limited connectivity.

Unrealistic cycle claims

High cycle numbers (e.g. 12,000) often lack meaningful warranty coverage and don't reflect real-world performance.



Safe and secure by design

Built-in cybersecurity, safe 48V architecture, and comprehensive fire protection - all designed to reduce downtime risks and ensure reliable long-term operation.



Fast and easy deployment

Quick, trouble-free installation with all-in-one cabinets, plug-and-play design and guided setup through our digital installation tools.

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Advanced cybersecurity built in

We develop software with strict encryption, access control, and GDPR compliance. All major releases undergo external penetration testing, and systems are built to remain secure even without cloud access.

Continuous protection

Pixii applies strong cybersecurity measures, routine audits, and continuous hardware monitoring to keep systems secure and reliable.

Safe 48V installation and operation

Built on a safe 48V architecture, Pixii avoids high-voltage risks and eliminates the need for complex cooling. Fewer components and built-in, verified software security make the system safer, simpler, and easier to maintain.

Comprehensive fire and safety protocols

We comply with international standards (IEC 62619, IEC 63056, UL 1973, UN38.3), pass thermal propagation tests, and include active cooling, overcharge protection, advanced monitoring, and fire detection/suppression.

Trusted safety by design

High-quality, tested battery cells and regional compliance ensure Pixii systems meet or exceed strict international safety standards. Installations are certified through Pixii Academy, and independent audits verify compliance.

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Fast and predictable delivery

With standarized products and logistics in Europe, we have predictable lead times: 3 months standard, 6 months for large-scale projects.

Modularity

Our modular architecture enables easy scaling and flexible system design. Systems can be expanded or serviced by adding or replacing individual modules - no need for full system replacements.

All-in-one design

Pixii's systems are standardized, factory-tested all-in-one cabinets. The plug-and-play format reduces on-site wiring, with most units pre-wired, shipped with batteries, and ready for fast deployment by certified installers.

Easy installation tools

Pixii provides digital tools to guide installation and commissioning, including a step-by-step web app and a mobile installer app. No external tools or specialist support needed.

Comprehensive support and training

Hands-on training through Pixii Academy, support channels, and our own AI assistant. Installers are equipped with the tools needed for safe, fast and reliable deployment.

Competition

Unknown software risk

Unverified code and limited oversight increase exposure to cybersecurity threats

Limited cybersecurity focus

Some systems rely on third-party tools with less frequent testing, which may leave them vulnerable to new threats.

Higher voltage systems

Demand stricter safety measures, more specialized handling, and can be harder and more dangerous to service. This adds complexity and potential downtime.

Basic compliance only

Many competitors meet minimum safety standards but skip advanced measures like thermal propagation testing or integrated suppression systems.

Higher fire risk

Lower-grade cells, insufficient monitoring, and unqualified installation practices increase the risk of overheating and thermal events.

Competition

Uncertain lead times

White-label systems produced outside Europe often face longer and less predictable delivery times.

Fixed, large scale units

BESS systems are often delivered in fixed, large-scale formats. Scaling up typically requires replacing or adding entire systems.

On site customization

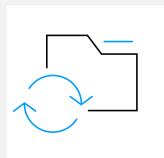
Systems often rely on separate components that must be integrated during installation. This increases complexity, time on-site, and the risk of errors.

Lack of installation tools

Lack of built-in, dedicated setup interface. Commissioning often relies on manual configuration and support.

Limited support and training

Training and support are often limited or fragmented, leaving installers dependent on generic manuals or third-party help.



Future-proof technology

Built to adapt and grow with changing energy needs.

With modular design, wide C-rate support and true scalability, our BESS integrate easily into existing infrastructure and ensures long-term value and readiness for future demands.

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Modular design

Modularity allows for easy upgrades and expansions, ensuring that the systems can evolve with changing energy needs and technological advancements.

C-rate support

Supports virtually any C-rate to match specific requirements.

Scalability through modularity

Our systems are scalable, meaning they can be adjusted to fit different sizes of installations, from small residential setups to large commercial and industrial applications.

Interoperability

Designed to integrate seamlessly with existing energy systems and infrastructure, supporting a wide range of applications and services.

Battery agnostic by design

Pixii systems are built to work with different battery types and brands. They can also be expanded or adapted as needs change, giving you freedom of choice and long-term flexibility without being locked into one technology.

Continuous innovation

Pixii invests in research and development to stay at the forefront of energy technology, ensuring that our products incorporate the latest advancements and meet future energy demands.

Easy expansion through AC coupling

Expansion is straightforward and flexible, with new units added directly on the AC side without system redesign.

Flexible and customizable by design

Pixii develops and integrates all components (except battery modules).

Easily adapts to specific customer needs (functions or configurations) - such as national grid codes or platform requirements.

Dynamic value stacking

Enables each system to perform multiple services simultaneously, maximizing value and adapting to changing grid and market conditions. Securing the best possible ROI for your BESS.

Competition

Monolithic design

Fixed or monolithic systems may become obsolete, forcing costly replacements instead of simple modular updates.

Limited C-rate flexibility

Typically limited to 0.5C systems. Scaling up requires an entirely new system size.

Rigid system sizing

Fixed systems gives limited scalability. Forcing customers to choose over-sizing (and over-paying) upfront.

Vendor lock-in

Limitation in proprietary hardware or software, making integration with existing energy systems more complex.

Locked to one battery type

Systems are often tied to a single battery technology or brand. This limits flexibility, makes upgrades difficult.

Legacy designs

Rely on outdated legacy designs, which can delay adoption of new technologies and limit long-term system performance and evolving grid compliance.

High voltage DC coupled

Scaling may need redesign of the DC system and bigger inverters, adding costs.

Black box limitations

White-label solutions offer limited flexibility and rarely allow for customer-specific adaptations.

Limited revenue/saving potential

Many systems are locked to single-use applications and struggle to adapt to changing grid or market needs.

Pixii delivers safe, reliable, and flexible energy storage that is easy to deploy, scales with your needs, and is backed by proven track record and expertise.

