www.pixii.com

PowerShaper

Cabinet only

Save costs through battery services like peak shaving, PV self-consumption, power boost and backup power.

The BESS that pays for itself by generating revenue from various electricity markets to maximize ROI.

Flexible grid tied battery energy storage

The PowerShaper product family is a modular and scalable all-in-one energy storage solution. Cabinets integrate PixiiBox converter modules, battery modules, and Pixii Gateway, and can be tailored to your needs for on- or off-grid use with local or EMS control.

Built for future-proof performance

Designed and manufactured in Europe. Combining robust engineering with high-quality components to deliver modular, scalable and reliable energy storage for critical applications and demanding environments.

Secure, connected, and compliant

Our 48V systems are built for always-on operation. Encrypted communications, secure remote access, and full GDPR compliance, enabling uninterrupted connectivity, real-time insight, and maximum ROI through value stacking.

Resilient by design, reliable in use

Pixii BESS feature built-in redundancy, active monitoring, and automated recovery protocols. This ensures secure operation even under failure or cyber threat, ideal for mission-critical energy storage needs.

Modular and scalable BESS platform

PowerShaper is available in outdoor, indoor, and air-conditioned versions. Scales easily from kW/kWh to MW/MWh with multi-cabinet configurations.

Comprehensive Service Level Agreement (SLA) and support

Proactive maintenance, fast response, and certified installers help maximize uptime and extend lifespan. SLAs secure optimal performance and ROI throughout the system lifetime.

Reliable and stable power supply

Maintain operations during power interruptions. The system supports off-grid functionality to keep essential loads running when the grid is down. No extra hardware needed.

Highlights

- Robust IP55 industrial cabinet
- Pre-configured and pre-wired
- Modular and scalable
- Galvanic isolation (AC-DC)
- European quality & GDPR compliance
- Safe ~48V installation and operation

Key functions

- Dynamic load balancing
- Backup & off-grid operation support
- Peak shaving
- Electricity market participation

Multiple PowerShapers can be delivered as a skid solution for larger applications

PowerShaper Cabinet only

AC specifications

Grid connection type [2]	IT / TT / TN
Phase config. (grid) [3]	1ph / 3ph
AC voltage (-10/+15%)	230V / 400V
Nominal AC voltage range	207 - 260V
Nominal frequency (grid)	50Hz
Max. AC power (±2%) [1]	50kWp
Off-grid operation support [4]	Yes
Generator backup support	Yes
Phase config. (genset) [5]	1ph, 3ph
Frequency range (genset)	45 - 66Hz

1. The stated power and energy capacities are baseline, or nominal, values. Actual performance can vary and may be constrained by several factors, including the state of charge (SoC), state of health (SoH) of the system, as well as thermal conditions.
2. IT/TT connection requires connection kit.
3. A 3-phase connection requires at least three PixiiBoxes, one for each phase.
4. Single cabinet only. Requires off-grid control system. Local modification for load prioritization.
5. A 3-phase connection requires at least three PixiiBoxes, one for each phase.

DC specifications

Installed capacity (max)	0kWh
Max. system capacity	51.2kWh
Nominal DC voltage	~48V

Communication and connectivity

Wired interfaces	Ethernet LAN, RS 485 (Modbus), Digital IO
Wireless interfaces	Wi-Fi hotspot (local AP), 4G (optional kit)
Internal comm. protocols	CAN bus, Modbus TCP/RTU
External comm. protocols	MQTT

Safety

Ingress Protection (IP)	IP55
Protection class	I
Overvoltage category (OVC)	III
Max. short-circuit current	10kA
Min. required SC current	1kA

Operating conditions

Operating environment	Outdoor
Thermal management	Fan, Heater
Acoustic noise 1m distance	<66.2dB(A)
Operating amb. temp. range [1]	-20 - +45°C
Operating relative humidity [2]	5 - 95% NC
Max. operating altitude	2000m

1. Derating from 45°C
2. Non-condensing.

Physical specifications

Dimensions (HxWxD)(mm)	2115x706x932
Net. weight (cabinet only)	220kg
Color	RAL 7035
Status indicator (type)	-
Max. batt. capacity (3U)	10
Max. batt. capacity (4U)	8
Installed PixiiBoxes	0
Max. PixiiBox capacity	15

Warranty and compliance

Security and safety standards

IEC/EN 62477-1,
RED (2014/53/EU) - Cybersecurity (effective Aug 2025)

Grid standards [1]

AS/NZS 4777.2 (AU+NZ),
EREC G99 (Type A & B) (UK),
IEC/EN 50549-1 (Type A & B) (EU),
TF 3.3.1 (Type A & B) (NO),
VDE-AR-N 4105 (DE), VDE-AR-N 4110 (DE),
Wymogi ogólnego stosowania (Type A) (PL)

EMC standards

IEC/EN 61000-6-1, IEC/EN 61000-6-2,
IEC/EN 61000-6-3, IEC/EN 61000-6-4

Environment standards

ETSI EN 300 019-2-1 (Class 1.2),
ETSI EN 300 019-2-2 (Class 2.3),
ETSI EN 300 019-2-3 (Class 3.2)

Warranty (years/cycles) [2]	See note

1. Designed in accordance with the relevant national and international standards listed above. Certification to specific revisions available on request. Additional local requirements may apply. AS/NZS 4777.2, EREC G99 (Type A & B) and VDE-AR-N 4105 currently valid for PixiiBox. System approval pending.
2. Warranty terms may vary based on your SLA agreement. Please review the warranty document for details