



PowerBase

600kW/614kWh, LFP



Fully integrated, pre-wired and factory configured system that reduces the installation time significantly.



The BESS that pays for itself by earning from electricity markets and saving cost through peak shaving and power boost.

Energy storage for easy site deployment

The PowerBase is a robust energy storage system built on a steel frame with the length of a standard ISO 20-foot container. Pre-wired and pre-configured, it minimizes installation costs and delivery time, accommodating up to 12 Pixii PowerShaper cabinets.

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.

Pre-wired, pre-configured

Delivered fully wired and configured with an integrated AC distribution cabinet linking all PowerShaper cabinets. Simplifies installation, speeds deployment, and reduces errors and labor cost significantly.

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.

Scalable, future-ready solution

Mounted on a transport-ready steel skid for fast handling and placement. PixiiBox power conversion units and battery modules are added on-site, enabling flexible setup and future expansion.

Highlights

- Pre-wired and pre-configured
- Safe and stable LFP batteries
- Modular and scalable
- Galvanic isolation (AC-DC)
- European quality & GDPR compliance
- Safe ~48V installation and operation

Key functions

- Grid support
- Peak shaving
- Balance market participation
- Electricity market participation



12 x PowerShaper cabinets with 50kW power and 50kWh capacity per cabinet

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AC specifications	
Grid connection type	TT / TN
Phase config. (grid) ²	3ph
Nominal AC voltage	400V
Nominal AC voltage range	207 - 260V
Nominal frequency (grid)	50Hz
Nominal AC current	864Arms (3Ph+N+PE)
Max. AC current (input)	996Arms (3Ph+N+PE)
Nom. cont. AC power (±2%) ¹	600kW
Max. AC power (±2%)	600kWp
Max. apparent power	600kVA
Max. reactive power	540kVAr
Power factor (Cos φ leading)	0.5 - 1
Power factor (Cos φ lagging)	0.5 - 1
THDi (grid connection)	5%
Off-grid operation support	No
Generator backup support	No

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. A 3-phase connection requires at least three PixiiBoxes, one for each phase.

DC specifications	
Installed capacity	614.4kWh
Usable capacity	491.5kWh
Max. system capacity	614kWh
Nominal DC voltage	~48V

Efficiency	
Max. efficiency (inverter)	96.9%

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	50kA
Min. required SC current	2kA

Operating conditions	
Operating environment	Outdoor
Thermal management	Fan, Heater
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)	2349x6058x2338
Net. weight (cabinet only)	4450kg
Net weight (equipped) ¹	9850kg
Color	RAL 7035
Status indicator (type)	-
Installed batteries (3U)	120
Max. batt. capacity (3U)	120
Installed PixiiBoxes	180
Max. PixiiBox capacity	180

1. Includes PixiiBoxes and batteries.

Battery	
Battery ID	LFP 100Ah 16S 3U 19in S
Battery chemistry	LFP
Cells in series (qty)	16
Battery block capacity (Ah)	100Ah
Battery block capacity (kWh)	5.12kWh
Max. depth of disch. (DoD)	80%
Max. charge/discharge cur.	100/100A
Max. C-rate	1C
Rack height (Units)	3U
Over-current protection	Breakers, Electronic
Dimensions (HxWxD)(mm)	133x442x440
Net. weight (battery block)	42kg
Battery connection type	Screw
Cycle life (cycles @DoD) ¹	4000 (80%)

1. Temp. 25±5°C and 0.5 C-rate, EOL: 70% SoH

Warranty and compliance	
Security and safety standards ¹	
IEC/EN 62477-1, RED (2014/53/EU) - Cybersecurity (effective Aug 2025)	
Grid standards ²	
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 - Pending (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)	

Battery standards	
IEC/EN 62619, UN38.3	
Warranty (years/cycles) ³	See note

1. Note that certifications and compliance for Safety, Grid, EMC, and Environmental standards for the PowerBase are based on the individual BESS cabinets used in this base configuration.
2. 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), IEC/EN 50549-1 (Type A & B), TF 3.3.1 (Type A & B) and VDE-AR-N 4105 currently valid for PixiiBox. System approval pending.
3. Warranty terms may vary based on your SLA agreement. Please review the warranty document for details.