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PowerBase XL

540kW/1.8MWh, 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.

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.

Complete high-capacity base

Fully equipped with safe high-density LFP batteries and modular PixiiBox power conversion units. The PowerBased XL is built for long-duration use, and ideal for sites with high energy demand.

Highlights

- Shipped with batteries installed
- Safe and stable LFP batteries
- Single-lift installation
- Galvanic isolation (AC-DC)
- European quality & GDPR compliance
- Safe ~48V installation and operation

Key functions

- PV self-consumption
- Peak shaving
- Balance market participation
- Electricity market participation

9 x PowerShaper XL cabinets with 60kW power and 200kWh capacity (180.6kWh @DoD 90%)

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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	778Arms (3Ph+N+PE)
Max. AC current (input)	896Arms (3Ph+N+PE)
Nom. cont. AC power (±2%) [1]	540kW
Max. AC power (±2%)	540kWp
Max. apparent power	540kVA
Max. reactive power	486kVAr
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	1806.3kWh
Usable capacity	1625.7kWh
Max. system capacity	1806kWh
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	Vonkajší
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)	2544x6360x2420
Net. weight (cabinet only)	6916kg
Net weight (equipped) [1]	22360kg
Color	RAL 7035
Status indicator (type)	-
Installed batteries (5U)	126
Max. batt. capacity (5U)	126
Installed PixiiBoxes	162
Max. PixiiBox capacity	162

1. Includes PixiiBoxes and batteries.

Battery

Battery ID	LFP 280Ah 16S 5U 19in A
Battery chemistry	LFP
Cells in series (qty)	16
Battery block capacity (Ah)	280Ah
Battery block capacity (kWh)	14.34kWh
Max. depth of disch. (DoD)	90%
Max. charge/discharge cur.	140/140A
Max. C-rate	0.5C
Rack height (Units)	5U
Over-current protection	Breakers, Electronic
Dimensions (HxWxD)(mm)	219.5x440x780
Net. weight (battery block)	120kg
Battery connection type	Quick
Cycle life (cycles @%DoD) [1]	7600 (90%)

Warranty and compliance

Security and safety standards [1]

RED (2014/53/EU) - Cybersecurity (effective Aug 2025),
RPEQ: Mechanically certified for lifting

Grid standards [2]

AS/NZS 4777.2 (AU+NZ),
EREC G99 (Type A & B) (UK),
IEC/EN 50549-1 (Type A & B) (EU),
VDE-AR-N 4105 (DE),
VDE-AR-N 4110 - Pending (DE)

EMC standards

IEC/EN 61000-6-2, 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)

Regional compliance

Load Restraint Guide 2018 (AU)

Battery standards

IEC/EN 62619, UN38.3

Warranty (years/cycles) [3]	Pozri poznámku

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. ***System approval pending. Currently valid for PixiiBox.***
3. Warranty terms may vary based on your SLA agreement. Please review the warranty document for details.