



Pixii Home

20kW/20kWh, Fan-filter, LFP



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



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

Residential storage, industrial-grade quality

Pixii Home is a smart and reliable battery, designed to lower your electricity bills. Increase your energy independence, and support a greener future. Built with industrial-grade quality and engineered to meet challenging outdoor conditions.

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.

Backup power when the grid fails

Stay powered during outages. Add an off-grid backup box to secure critical appliances and keep your home running, even when the grid goes down. Sold separately.

Smart monitoring and install tools

Save time with guided setup and simplified commissioning using the Pixii Installer App. Homeowners get real-time insights and full control through the Pixii Home App, straight from their phone.

Durable Nordic design

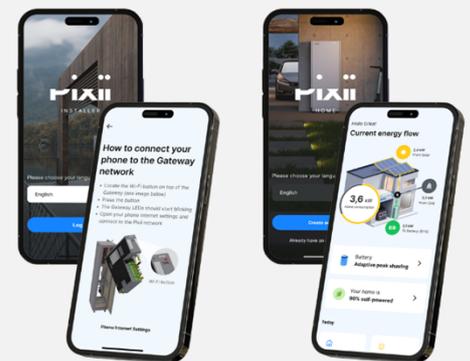
This version is delivered fully equipped with 20 kW power and 20 kWh capacity, and supports AC-coupled solar.

Highlights

- Robust IP55 industrial cabinet
- Fully equipped with 20kWh capacity
- Operates at temp. down to -40°
- 10 years or 10 000 cycles warranty*
- European quality & GDPR compliance
- Safe ~48V installation and operation

Key functions

- Peak shaving
- PV self-consumption
- Backup power options available
- Electricity market participation



Fast setup with Installer App and full control for homeowners with the Pixii Home App

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AC specifications	
Grid connection type	TT / TN
Phase config. (grid) ¹	3ph
AC voltage (-10/+15%)	400V
Nominal AC voltage range	207 - 260V
Nominal frequency (grid)	50Hz
Nominal AC current	28.8Arms (3Ph+N+PE)
Max. AC current (input)	33.2Arms (3Ph+N+PE)
Nom. cont. AC power (±2%)	20kW
Max. AC power (±2%)	20kWp
Max. apparent power	20kVA
Max. reactive power	18kVAr
Power factor (Cos φ leading)	0.5 - 1
Power factor (Cos φ lagging)	0.5 - 1
THDi (grid connection)	<5%
Off-grid operation support ²	Yes
Generator backup support	No

1. A 3-phase connection requires at least three PixiiBoxes, one for each phase.
2. Single cabinet only. Requires off-grid box. Local modification for load prioritization. Single phase limited to 10kW for on/off-grid AC connection

DC specifications	
Installed capacity (max)	20.5kWh
Usable capacity (max)	16.4kWh
Max. system capacity	20.5kWh
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)
Internal comm. protocols	CAN bus, Modbus TCP/RTU
External comm. protocols	MQTT

Safety	
Ingress Protection (IP)	IP55
Protection class	I
Overvoltage category (OVC)	II
Max. short-circuit current	10kA
Min. required SC current	0.5kA

Operating conditions	
Operating environment	Outdoor
Thermal management	Fan, Heater
Acoustic noise 1m distance	<60dB(A)
Operating amb. temp. range ¹	-40 - +45°C
Operating relative humidity ²	5 - 95% NC
Max. operating altitude	2000m

1. Battery startup below 0°C may require internal heating and AC power, please refer to the "Temperature Table" in the Pixii Home guides. Derating from 45 °C
2. Non-condensing

Physical specifications	
Dimensions (HxWxD)(mm)	1717x684x387
Net. weight (cabinet only)	81kg
Net weight (equipped) ¹	261kg
Color	RAL 9006
Status indicator (type)	LED
Installed batteries (3U)	4
Max. batt. capacity (3U)	4
Installed PixiiBoxes	6
Max. PixiiBox capacity	6

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

Warranty and compliance

Security and safety standards
IEC/EN 62040-1, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477-1, RED (2014/53/EU) - Cybersecurity (effective Aug 2025)

Grid standards¹
EREC G99 (Type A) (UK), IEC/EN 50549-1 (Type A) (EU), TF 3.3.1 (Type A) (NO), VDE-AR-N 4105 (DE), Wymogi ogólnego stosowania (Type A) (PL)

EMC standards
IEC/EN 61000-3-2, IEC/EN 61000-3-3, IEC/EN 61000-6-1, IEC/EN 61000-6-3

Environment standards
ETSI EN 300 019-2-3 (Class 3.2), IEC/EN 63000 (RoHS)

Battery standards
IEC/EN 62619, UN38.3

Warranty (years/cycles)² 10/10000

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. EREC G99 (Type A) and VDE-AR-N 4105 currently valid for PixiiBox. System approval pending.
2. Whichever comes first. EoL defined as ≥70% SoH. See [warranty document](#) for details.