

Pixii Gateway

Controller and communication hub for all Pixii systems

The Pixii Gateway is the controller and communication hub for all Pixii systems. It communicates securely with all elements within the system and the outside world for system monitoring and advanced control, enabling both local flexibility and the opportunity for coordination and flexible fleet management.

With built-in services and the ability to set priority and scheduling of services, Pixii Gateway provides full control over your Pixii Battery Energy Storage System (BESS). Whether you want to use it for peak shaving, PV self-consumption, arbitrage, grid or voltage support, or flexibility markets, your Pixii BESS will always be ready for optimal performance.

Pixii Gateway enables secure integration with on-site and off-site Energy Management Systems (EMS), site controllers, and third-party equipment such as EV chargers, meters, and more. Pixii Gateway contains I/O ports for peripherals, such as smoke detectors, climate control, communications, etc. See 15641_Pixii PowerShaper Gateway Reference Manual for details.



Gateway Controller

Services

- Demand Response
- Power Control
- Target State of Charge (SoC)
- Peak Shaving
- Adaptive Peak Shaving
- Voltage Support
- Ancillary Services

Communication Interfaces

- RS-485
- CAN bus
- Ethernet, USB
- Wi-Fi access point (for local configuration)
- 4G is available as an option through USB

Communication Protocols

- Modbus/RTU
- Modbus/TCP
- TCP/IP, MQTT, HTTPS, CAN

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General data		General data	
DC Input voltage	30-60Vdc	Operating temperature range	-20°C to +60°C
Max DC Input current	5A	Dimensions (W x D x H)	265x213x45mm
Communications protocols	Modbus/RTU, Modbus/TCP, TCP/IP, MQTT, HTTPS and CAN	Weight	0.960kg
Applicable Standards	EN 61010-1, IEC 61010-1		

Key functions			
Peak Shaving	Reduce your demand charges and save costs by shaving the peaks of your power consumption.		
Arbitrage	Support loads from the battery when electricity rates are high and charge the battery when electricity rates are low.		
PV self-consumption	Get the most out of your solar investment and reduce your dependency on the grid through smart power management, enabling you to direct excess energy to batteries for later use during peak hours.		
Local power boost	Increase maximum available power capacity by adding smart energy storage systems in parallel with the grid. In locations with temporary overloads, energy storage systems can cover the overload and avoid grid upgrades.		
Voltage support	Enables grid operators (DSO's/DNO's/DNSP's) to enhance quality of supply on long weak lines significantly. Unique functionality for voltage-based phase balancing active/ reactive power compensation.		
Balance services/ Flexibility markets	Unlock the value of your battery energy storage system and monetize your system's flexibility by offering available capacity to ancillary services like FFR, FCR, standard ramp FCAS services and more.		