

Microgrid Controller

Hardware agnostic software that works with existing assets to improve equipment efficiency, reducing or eliminating the need for expensive infrastructure upgrades.

The PXiSE Microgrid Controller helps utilities, campuses, and communities manage and coordinate localized DERs and loads by independently balancing real and reactive power, and efficiently dispatching resources for resiliency, power quality, and economic benefit.

Product applications

Behind-the-meter (BTM)



In-front-of-the-meter (FTM)

Microgrid

- ✓ Grid-tied
- ✓ Isolated

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Battery Energy Storage System (BESS)

- ✓ Grid-tied
- ✓ Isolated

Power assurance and control

Maintain reliable, renewable power during any type of expected or unexpected grid event without sacrificing power quality or consistency.

- Seamless islanding and continuous reconnection opportunity monitoring
- Get actionable insights into grid efficiency and locational constraints with the means to control, calibrate and optimize
- Maximize allowable power output and stabilize voltage at POI with precision control

Stability

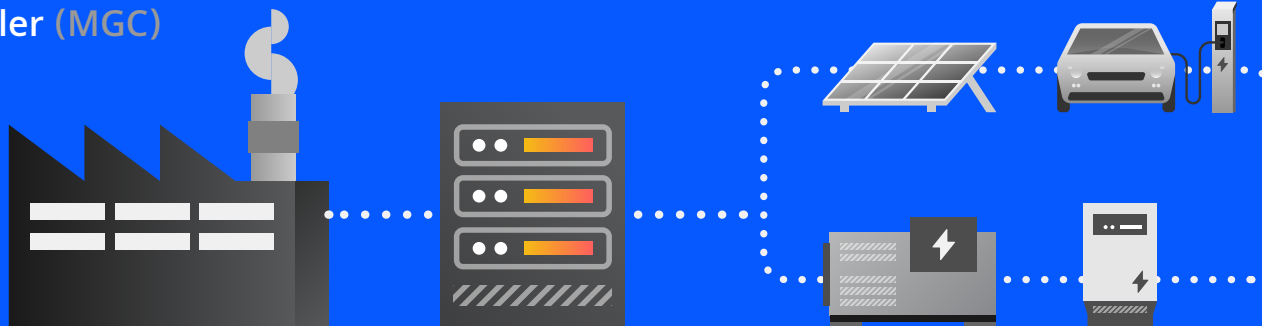
The Controller identifies deviations in facility current, voltage and frequency and manages local voltage fluctuations and excursions to prevent blackouts.

- Independently controls real and reactive power
- Stabilizes the grid by coordinating and dispatching assets in real time to compensate for sudden load changes
- Proprietary predictive analytics engine forecasts and dispatches assets



PXiSE Energy Solutions

Microgrid Controller (MGC)



Unlimited distributed energy resources (DERs)

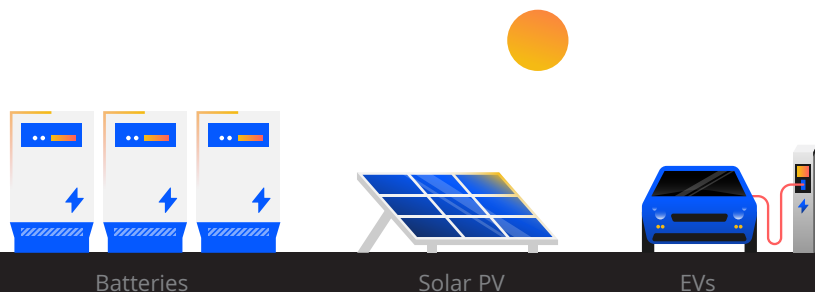
Reach your renewable generation goals without compromising power quality or safety. Built-in AI ensures power quality of intermittent assets.

- High-speed phasor measurement units (PMUs) operating at 60 Hz match load and weather forecasts to real-time data
- Optimized timing of renewable generation and state-of-charge of the battery system enable maximum renewable generation and minimal curtailments
- Manage a diverse mix of DERs individually, as groups, and as a holistic system

Economic benefit

Decarbonize your business by electrifying your equipment while keeping costs down.

- Easily configurable system enables you to meet business needs while autonomously balancing load requirements against rate structures
- Participate in real-time and day-ahead energy market programs
- Maintain optimal conditions for sensitive equipment by autonomously mitigating deviations in facility current, voltage, frequency, and other measured data
- Behind-the-meter energy savings and wholesale export optimization



No limit to the number of controllable DERs

Batteries

Solar PV

EVs

