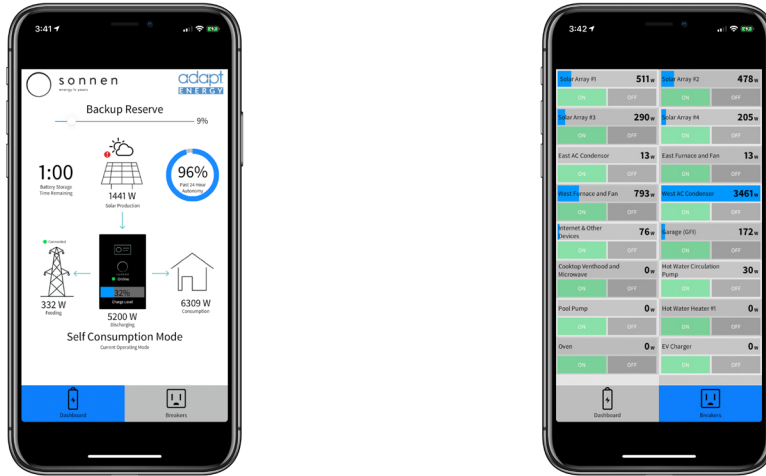
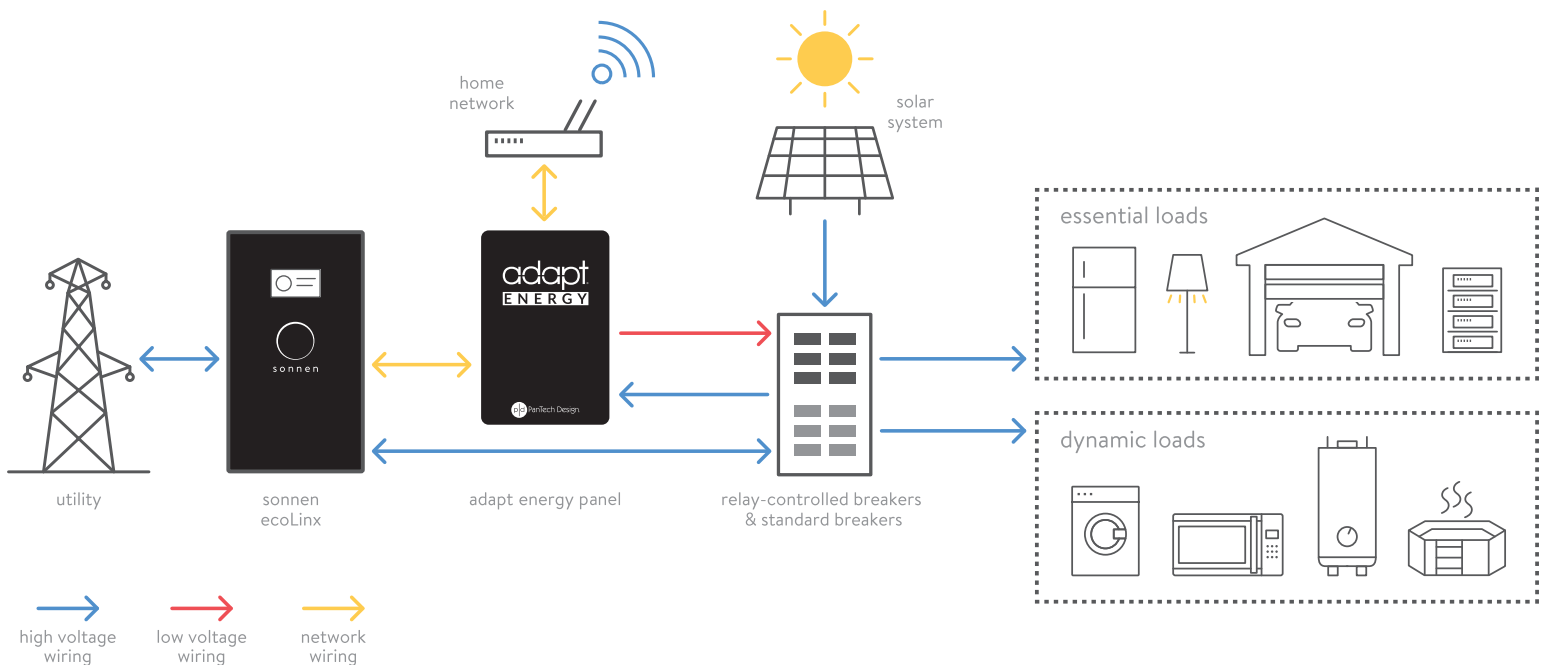


Energy Automation



Energy Automation is a combination of different technologies. It is multiple industries coming together, to provide energy solutions for our daily lives. But it's really less about what it is and more about what it does. It stores energy from the grid and your own renewable sources. It manages energy to make your home more efficient. And it anticipates power outages to keep the lights on for you. More than anything, it puts you in control of your energy.



What it Does

Protect

Energy automation provides backup power for your home.

EcoLinx stores energy, from the grid and solar, to provide power when energy sources cannot. Adapt Energy provides control over energy consumption (load shedding) to increase the amount of time backup power will last. EcoLinx also features a configurable backup reserve so that a minimum amount of reserve power is always available for a power outage. Adapt Energy works with ecoLinx to control the configurable backup and change the reserve amount, in anticipation of grid loss.

Control

Energy automation gives you direct control of your energy.

Working with ecoLinx, Adapt Energy provides the interface to manage energy storage and takes it further by providing control of the devices that consume energy in your home. The Adapt Energy Panel controls breakers to power on and off whole circuits and integrates with home automation systems to individually control lights, windows, thermostats, and more. All of which are configurable with Power Profiles so you can pre-configure actions and events.

Conserve

Energy Automation balances energy demand in your home.

EcoLinx features multiple modes including Self-Consumption and Time of Use. Self-consumption charges the battery when solar energy is abundant and discharges, when it is not, to power your home and reduce grid energy consumption. Time of Use can be configured to charge from the grid when energy is cheap and abundant and discharge during peak demand times to reduce grid strain. Adapt Energy works with ecoLinx to configure the modes and shed loads to increase battery duration.

Prepare

Energy automation helps you weather the storm.

Adapt Energy can anticipate weather events and alert you to increase ecoLinx's backup reserve. Adapt Energy also notifies you when a power outage occurs so you can choose how much of your home to power from the battery. Even if you miss an alert, Adapt Energy will protect your home, automatically, by setting the backup reserve and selecting a Power Profile. And all the alerts, profiles, and settings can be customized and configured by you or your installation technician.

The Parts

Sonnen ecoLinx

This is the energy storage system that provides storage as well as grid and solar information to the Adapt Energy Panel.

Adapt Energy Panel

The hardware and software that manages energy by controlling breakers, communicating with ecoLinx, and connecting to leading home automation systems.

Renewable Energy Source (Solar)

Alternative source of energy that not only charges ecoLinx, but also offsets use of the utility grid during the day to power loads in the home, even during a grid outage.

Controllable Breakers

Specialized circuit breakers that enable the Adapt Energy Panel to control whole circuits in the home.

Energy Monitoring

Real-time power consumption for monitored circuits (Curb Energy Monitoring required)

Lighting Control

A lighting control system that can communicate with Adapt Energy to manage lights for energy efficiency and emergency grid power loss.

Window Control

A window covering control system that can communicate with Adapt Energy to manage energy efficiency through natural light and climate insulation.

Climate Control

Thermostats or climate control system that can communicate with Adapt Energy to manage energy efficiency and environmental comfort.

Additional Home Automation

A home control system that can communicate with Adapt Energy to manage individual devices such as TVs, sound systems, and other electronic components.

The Details

Adapt Energy Panel

**See price sheet for pricing information*

What's Included...

- Adapt Energy enclosure - Dimensions: 14 3/8" X 23 1/2"
 - Control processor
 - Breaker relay control equipment
 - UPS for devices in enclosure only
 - Network switch for ecoLinx and processor only
- 16 Breaker Control Wires - standard length 15' (see price sheet for custom lengths)
- System Requirements Document, Start Guide, and Configuration Drawings

Features

- Control of up to 16 relay-controlled breakers per panel¹
- ecoLinx configurable battery backup
- Weather and grid loss alerts
- Energy monitoring (requires Curb Pro energy monitoring www.energycurb.com)
- Easy web utility setup
- iOS app user interface
- Built-in UPS to sustain initial power loss (AEP equipment only)
- Built-in ethernet switch to connect to existing network (ecoLinx and AEP processor only)

Additional Items (not included in Adapt Energy Panel price)

- Sonnen ecoLinx battery
- Relay-controlled breakers
- Required wiring outside of Adapt Energy Panel
- On-site support or installation
- Shipping charges
- Taxes where applicable

(¹ AE Panel controls 16 breakers standard - custom options available for up to 100 breakers - contact PanTech design for custom order pricing and information.)

Questions

What is needed for the most basic Energy Automation System?

A Sonnen ecoLinX battery, the Adapt Energy Panel, and controllable breakers.

What does a basic Adapt Energy system do?

Weather alerts, load scheduling, configurable backup along with the standard ecoLinX features.

How many Adapt Energy Panels are needed per project?

You will need (1) Adapt Energy Panel for each ecoLinX unit.

Is energy monitoring included with the standard Adapt Energy Panel?

The Adapt Energy software has energy monitoring built in. But you do need additional hardware to support it. Adapt Energy supports Curb Pro energy monitoring hardware. Visit www.energycurb.com for more information on purchasing a Curb system.

Does an Adapt Energy system require solar?

No, the ecoLinX system can charge from the grid during off-peak times and re-deploy it during peak periods (Time of Use). All other energy automation functionality still applies.

Where do I get the Adapt Energy Panel?

You will purchase the Adapt Energy Panel from PanTech Design.

How do I get custom Breaker Control Wire lengths?

See price sheet for custom wire length pricing and contact PanTech Design to order with your Adapt Energy Panel.

Which controllable breakers do I need?

The breakers required are manufactured by Schneider Electric. They are SquareD breakers in the QOPLILC line in the Power Link series.

Example Part Number: (single-pole 15 amp controllable breaker) [QO115PLILC](#)

Where do I buy the controllable breakers?

The controllable breakers can be purchased from PanTech Design or a stocking distributor.

Which breaker panel do I need for the QOPL Series Breakers?

Any [QO Series load center](#) from Schneider Electric can support the QOPL Series breakers. Please note that the QOPL Series breakers are not compatible with the Schneider Electric HomeLine series load centers.

Questions

How do I know which loads require controllable breakers?

Controllable breakers are only needed for loads that need to be powered on and off during a grid outage. There are three types of loads:

Massive Loads should always be OFF in an outage situation (e.g. water heater, hot tub, etc.) Any load over 7,000 watts must be treated as a massive load. These may not need controllable breakers depending on the design.

Critical Loads should always remain ON in an outage. (e.g. fridge, network, router, Adapt Energy Panel, etc.) and do not need controllable breakers, in most cases.

Dynamic Loads are loads the customer may wish to stay ON depending on the outage situation. These loads should be focused on when specifying the load center to ensure that the ecoLinX can support both the Critical and Dynamic loads when they are all on.

How do I know what size breakers I need?

Breakers will be sized based on an electrical design prepared by an electrician, in conjunction with Sonnen.

How do I eliminate the Protected Loads Panel (PLP)?

By placing controllable breakers in the main panel to dynamically manage loads in the event of an outage. Any load that needs to be turned ON in an outage (including critical loads) will require a controllable breaker.

Does the Sonnen ecoLinX directly control the breakers?

No, an Adapt Energy Panel is required to control the breakers.

What are my next steps?

For more information, and to help us better assist you with next steps, please complete the [Energy Automation Inquiry Form](#).