



FranklinWH aPbox

Remotely and automatically manage a solar system

There are circumstances in which a solar (PV) system cannot be connected through the aGate X solar breaker, either on grid side or load side. The FranklinWH aPbox is a junction that provides an intelligent solution, linking those PV systems into the Franklin Home Power architecture for ease of management and control.

When installing a Franklin Home Power (FHP) system alongside a PV system, there are multiple PV installation configurations which require different methods to connect them with a home energy management system such as the FHP. The aPbox is designed to help installers address those issues. It is also designed to protect the aPower X battery from overcharging while maximizing the utilization of photovoltaics.

The aPbox has built-in meters and current transformers (CTs) to measure electricity. It can also connect and disconnect the solar systems as conditions require.

Applicable Scenarios

Remote solar system

An existing solar system is far from the aGate X installation location and changing the power line wiring will increase overall costs. An aPbox can be used for easier connection without changing the power line route. Newly added solar systems can also use aPbox for control or metering. An aPbox can disconnect the solar system when it is over generating power in an off-grid or blackout situation, or when excess generation can't be exported to the grid due to regulatory limitations.

Oversized solar system

The total power of a solar system exceeds the maximum continuous current of 64A for the 80A solar circuit breaker in the aGate X. Panels providing the excess can be connected to load-side of the aGate X, and the aPbox will be used for metering and control.

Over generating solar system

The generated power of the solar system exceeds the total continuous power of the aPower X batteries installed. To prevent the entire solar system from being shut down, the excess production will be connected to load-side and aPbox will be used for metering and control.

Features

Flexible Configuration

Flexibly arrange the power generated by the solar system to realize the maximum utilization of solar energy.

Simple Installation

Easily connect remote solar systems to the aGate X, saving labor costs and shortening project time.

Highly Compatible

One aGate X can control up to 2 aPbox units, a maximum of 130A controllable solar current.

Easy control

Automatically manage your solar system. In off-grid or blackout scenario, it will automatically control the over generating solar system.

Specification

Electrical Specifications

Nominal Voltage	120/240VAC, split
Frequency	60 Hz
Rated Output Current	1 circuit, max 65A
Rated Input Current	2 circuits, max 65A total

Mechanical Specifications

Dimensions (W x H x D)	11.8 in x 17.7 in x 5.9 in (300mm x 450mm x 150mm)
Weight	21.2 lbs. (9.6kg)
Mounting Options	Wall mount (Indoors/Outdoors)

Environmental Specifications

Operating Temperature Range	-4°F to 122°F (-20°C to 50°C)
Storage Temperature Range	-22°F to 140°F (-30°C to 60°C)
Operating Humidity (RH)	Up to 100%
Maximum Altitude	9843 feet (3000 meters)
Type of Enclosure	NEMA Type 3R

Compliance Information

Compliance	UL 1741
Environment	California Proposition 65
Emissions	FCC Part 15 Class B, ICES 003

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