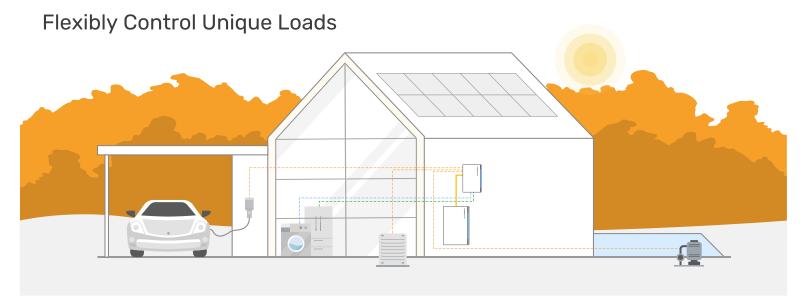


# FranklinWH Smart Circuits Module



Home electrical devices are becoming increasingly more intelligent and connected. Homeowners can manage individual devices through networked software linked to smart phones. However, that focus is on those devices regardless of the power being supplied to the home. The "smart" part of the equation doesn't manage power.

The Franklin Home Power (FHP) system is an intelligent home energy solution that enables you to manage your home's energy. The FHP integrates solar, energy storage (batteries), the utility grid, and even standby generators into a single app to allow you to manage your power consumption, and supply, day-to-day and during grid outages.

The FranklinWH aGate is the smart controller that manages power supply. The aGate can be programmed to optimize daily energy supply, including to minimize grid usage during expensive, high-demand periods. Load shifting helps homeowners by relying on battery and solar power during those peak periods, while recharging batteries during low-demand, low-price time periods.

However, some loads are unique. Electric vehicle (EV) chargers, air conditioners, and other electrical devices need to be managed more intelligently. The FranklinWH Smart Circuits Module, an optional aGate component, provides the ability to manage those unique devices remotely and automatically from anywhere and anytime.

Users can connect and disconnect up to three Smart Circuits via the FranklinWH app. Smart Circuit 1 & Smart Circuit 2, 1-pole circuit breakers, can be merged into a single, 2-pole circuit as needed. Smart Circuit 3 requires a 2-Pole circuit breaker.

In the FranklinWH app, homeowners can schedule times for the circuits to automatically turn on and off. For instance, the EV charger can be set to only run from 1:00 am to 5:00 am, during a low demand, low-cost period. Alternatively, homeowners can manually turn on and turn off individual Smart Circuits as needed. An example of this is turning on the air conditioner shortly before returning home.

## **Time-of-use Load Shifting**

Utilities companies continue to migrate to a time-of-use (TOU) billing plan. The cost of a kilowatt-hour of energy varies throughout the day, and the week, depending on expected user demand. That means afternoon and evening hours are usually the most expensive while late night and early morning are typically the least expensive.

The above EV charger example shows how load shifting can save money. When a homeowner returns home and plugs the car into the charger, that's typically early evening. If the car charged then, it would be at the highest billed rate.

Smart Circuits allow the owner to plug in and forget about the charge. The set schedule will turn on the charger during the lowest billing rate period, saving money.

## **Backup Energy Management**

When the FHP is running from batteries, either because of a grid outage or because the home is completely off grid, Smart Circuits can be automatically managed.

Homeowners can set a state-of-charge (SOC) threshold below which the Smart Circuits are automatically turned off. When the FranklinWH aPower batteries drop below the set SOC level, the circuits are disconnected. When the solar array, a generator, or the grid powers the batteries back above the SOC threshold, the circuits will be reconnected.

This is good for devices such a pool pump, as shutting it down will provide longer backup time for other household devices.

## **Features**

## **Easy Control**

Remotely and automatically manage unique family loads, connecting and disconnecting them easily via the FranklinWH арр.

#### **Smart Use**

Set the appropriate working time for family appliances, add convenience to your daily life.

### **Cost Saving**

Work within TOU rate structures to power large loads at a low electricity price.



# **Specification**

#### **Smart Circuits Module**

imart Circuit 1, Smart Circuit 2, Smart Circuit 3): Max @120 V & 1 × 50 A Max @120 V & 1 × 80 A Max @240 V
Smart Circuit 1+Smart Circuit 2 merged, Smart Circuit 3):  Max @240 V & 1 × 80 A Max @240 V
x × 3.3 in (193 × 175 × 84 mm)
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