

Apple IoT with HomeKit

NOTE: Use this document in conjunction with the PDF slideshow handout.

HomeKit Hub

- Apple TV 4K - 32GB \$179, 64GB \$199
- HomePod Mini - \$99
- iPad - Starting from \$399

There's a difference between a Hub and a Bridge. If the device is HomeKit compatible, you need a Hub if you are going to set up automation with a device or set up HomeKit Secure Video for streaming from a security camera. You need a Bridge if the device is not HomeKit compatible. Not all Bridges are HomeKit compatible.

In the following list, items marked with an asterisk were mentioned in the SIG presentation. The complete list with full description is here:

<https://www.apple.com/shop/accessories/all/homekit>

Bridges

Required by many smart devices. HomeKit hub — in combination with your Apple ID — gives your iPhone, iPad, or Mac, a way to securely talk to your HomeKit devices even when you're outside the house Both

Allows communication with and control by HomeKit App for various types of devices

Some routers do not support certain bridges

Most HomeKit devices require WiFi connection and some bridges have weak signals which means the device must be close, or use an amplifier or repeater to access the signal

Many bridges and devices only support 2.4GHz band so your iOS device must be connected to this band

Each bridge needs an Ethernet port on your router.

- * **Phillips HUE HomeKit Upgrade Bridge** - \$59.95
The Philips HUE Bridge provides an upgrade from your existing HUE Bridge to one that's HomeKit enabled. The bridge lets you control all of your Hue products via the Hue app using your iPhone, iPad, or iPod touch. Once you have installed the Hue bridge and downloaded the app on your iOS device, you're ready to start building your own customized lighting system.
- * **Wemo Bridge** - \$29.95
With the Wemo Bridge, you can quickly and easily enable your Wemo devices to work with Apple HomeKit. This smart bridge allows you to connect your Wemo smart plugs and light switches to Apple HomeKit,

enabling you to easily and securely control your smart home using the Apple Home app and Siri on an iPhone, iPad, or Apple Watch.

Cameras

- **Logitech Circle View Apple HomeKit-enabled security camera** - \$159.95
Circle View wired camera brings to Apple HomeKit Secure Video best-in-class video quality with Logitech TrueView™ technology. Carefully crafted glass optics and a high-end sensor provide razor sharp 1080p HD video, an ultra wide 180° diagonal field-of-view, clear contrast with wide dynamic range, and enhanced infrared night vision capability up to 15 feet away.
- * **eufyCam 2 Pro** wireless home security camera systems - \$349.95
The eufyCam 2 Pro Wireless Home Security Camera System allows you to see exactly what is happening in and around your home in crisp 2K clarity (1080p while using HomeKit).
Eufy is a product of Anker which is a known brand, but not for cameras.
Affordable security cameras with year long battery life.
Motion triggers the camera which stores data to the basestation.
Basestation connects via ethernet to your router for software updates.
Does not use WiFi, instead uses proprietary Wireless tech which has latency issues.
Also has range issues so base needs to be closer than WiFi range.
Captures 1080p video but only has room in base station for about a month of clips!
- **Eve Cam** - \$149.95
With the Eve Cam secure indoor camera, you can keep a close eye on your home around the clock. Receive notifications on your iPhone immediately when something is up in your home – and protect the privacy of your personal space in the process.

Doorbells

- **Logitech Circle View wired doorbell** - \$199.95
Present a smarter welcome with the Logitech Circle View Wired Doorbell. Circle View Doorbell is an easy-to-use video doorbell featuring HomeKit Secure Video with Face Recognition, best-in-class Logitech TrueView™ video, a 160° field of view with head-to-toe HD optics, and color night vision.
Has video and audio capabilities.
160 degree view.
Does not use IR night vision camera at night. Instead uses standard night color RGB camera.
Requires home hub (Apple TV, HomePod Mini) and an iCloud subscription.
Hub must be on to stream video previously captured!

Facial recognition supported via Apple Photos library.

Lights & Bulbs

- **Nanoleaf Essentials A19 Bulb** - \$19.95
Nanoleaf Essentials provides a seamless introduction to smart lighting. Unique multi-faceted bulb design and the purest color performance creates a stunning illumination in your room. High brightness and endless colors will take your space from work mode to game night fun instantly. Customize and control through the Nanoleaf app, controller, or voice commands.
- **Nanoleaf Essentials 80" Lightstrip Starter Kit** - \$49.95
Nanoleaf Essentials provides a seamless introduction to smart lighting. Take your space from work mode to game night fun instantly, with bright and efficient lightstrips. With an even light glow and endless colors you can create stunning backlit illumination in your room. Customize and control through the Nanoleaf app, controller, or voice commands.
- **Nanoleaf Shapes Hexagons** - \$199.95
Nanoleaf introduces a completely new line of Shapes that can all connect together, to finally offer truly limitless customization for your smart home decor. It's perfect for designing a statement wall, setting up your personal productivity zone, or creating the right ambience for any occasion.
- * **Philips Hue White and Color Ambience 4-Pack Starter Kit** - \$199.95
The Philips Hue White and Color Ambience Starter Kit helps you easily add ambient color to any room. The kit includes four color smart bulbs and a Hue Bridge, which provides full control of the lights, access to the Hue app on your iPhone or iPad, and a wide range of features.
Four lights with Bridge in starter kit.
Rated best smart bulbs by several sources.
Can use Philips App or HomeKit app, but Philips allows more functionality.
Register lights using small print on bulb.
Bridge can control any Philips LED bulbs: sconces, light strips, indoor and outdoor light fixtures, wireless switches and remotes, and motion sensors.
Pricy and no Lumens statement.
- **Philips Hue Play White and Color Ambience Light Bar** - \$129.95
Create a vibrant ambience with the Hue Play light bar. Choose from 16 million colors to experience different light effects. Lay it on the floor, let it stand on the cabinet, or mount it on the back of the TV and paint your wall with light. Connect it to a Hue Bridge* for full smart experience. This base kit provides two light points and a power supply.

Locks

- **Level touch** - \$329.95
Level Touch is the smallest, most capable smart lock ever. In the footprint of a traditional lock, you can add intuitive new ways for everyone to access your home.
By hiding technology on the inside of the door, Level Touch is the smallest smart lock ever made.
Since it includes a key entry, this lock can easily be picked.
- * **Yale Assure Lock SL Touchscreen Deadbolt - Black** - \$199.95
Upgrade your door with the Assure Lock SL, a touchscreen deadbolt for key-free entry. The lock is HomeKit-enabled so it allows you to lock or unlock and share access all from your Yale Secure app. Assure Lock also features optional Auto Relock so it will even lock itself once the door is closed. Plus, you can lock or check current status just by asking Siri.
Most have key backups (a must), MUST check door size installation reqmts (thickness of door, distance to edge from center of hole): Yale
Simple design with keypad outside and knob inside.
Only comes in silver or black from Apple, two other finishes from others.
Touchscreen sometimes does not detect touches and requires numerous tries to open.
Yale has multiple Apps for their various products, and only one App will work with any one product.
Requires the iM1 smart module to work with HomeKit (included if you buy fro Apple).
- **August Wi-Fi Smart Lock** - \$249.95
Welcome home to an even smarter home. Upgrade your deadbolt with the all-new August Wi-Fi Smart Lock, a lock so smart, it simplifies your daily life and the way your family lives. And with built-in WiFi, our lock requires no additional bridge to connect.

Mesh Wi-Fi Routers

- **eero Pro Mesh WiFi Router** - \$199.95 (\$499.95 3 pack)
The eero Pro Mesh WiFi Router is our fastest tri-band WiFi device for serious streaming, data-heavy work, and even competitive eSports. Set up eero Pro as a standalone router, or extend any existing eero setup by up to 1,750 square feet. The 3-pack system covers up to 6000 sq ft.
- * **eero Pro Mesh WiFi System (1 Pro + 1 Beacon)** - \$299.95 (\$319.95 for 2 beacons)
The eero Pro Mesh WiFi System include one eero Pro and one eero beacon and provides a fast, reliable WiFi setup that covers up to 3,750 square feet. The eero Pro plugs directly into your modem and gives you the fastest WiFi on the block. With 2 beacons, covers up to 5,500 sq ft. Each additional

- beacon bought separately is \$95. Wi-Fi 5. (Eero also has a Wi-Fi 6 Pro, Tri-band model available. A 3-pack is \$599 and covers up to 6000 sq ft.)

 - **eero Mesh WiFi Router** - \$79.95 (\$199.95 for 3-pack)
The eero Mesh WiFi Router delivers fast speeds and reliable connectivity. Set it up is as a standalone router, or you can use it to extend any existing eero setup by up to 1,500 square feet, tri-band mesh system. The 3-pack covers up to 6,000 sq ft. Wi-Fi 5, dual band.
 - **Linksys Velop Whole Home Mesh Wi-Fi System** - (\$179.95 1-pack, \$299.95 2-pack, \$399.95 3-pack)
Velop by Linksys is a whole home Wi-Fi system that works in perfect harmony to create a high-range mesh network. Unlike traditional routers with range extenders, Velop's Tri-Band Wi-Fi system provides 100% Wi-Fi throughout your home. Each Node increases Wi-Fi range 2,000 sq. ft. and you can add more to grow your mesh network.

Outlets

All use WiFi, some support bluetooth, and can be controlled from Home App. Most work without a bridge. Some easier to set up than others.

- * **Wemo Mini Smart Plug** - \$24.95
The Wemo Mini Smart Plug lets you control your lights and appliances right from the Wemo or Apple Home app on your iPhone, iPad, and even Apple Watch. The Smart Plug uses your existing home Wi-Fi network to provide wireless control of lamps, heaters, fans, and more—with no subscription or hub required. Simply plug the Wemo Mini Smart Plug into an electrical outlet, plug a device into the Smart Plug, and control your device from anywhere.
Wemo wants to be plugged in to set up, but then asks you to scan the bar code on the inside which means you have to unplug it!
Easy to install, but bar code on back and should be plugged in to set up. Physical button allows you to turn it on or off without reaching for App (and helps when device can not be found by HomeKit).
Does NOT like to change networks - I changed my router and I never got it to work again.
Says you do not need a bridge to work, but other users say you do.
- **Wemo Wi-Fi Outdoor Smart Plug** - \$39.95
The Wemo Wi-Fi Smart Outdoor Plug gives you total control over your lights, holiday decorations, and other outdoor devices. Featuring two weather-resistant outlets, you can set schedules and control two devices together from anywhere using the app or your voice with Apple HomeKit and Siri. You can also use Away Mode to randomly turn lights on and off when you're not home. Sync lights connected to the Smart Outdoor Plug

with the sunset and you'll walk out to a backyard that's ready for evening activities.

- **iHome | control iSP6 SmartPlug** - \$39.95
iHome's iSP6 SmartPlug lets you control any connected device from home or remotely from any location using the app on your iPhone or iPad. Turn on a light or turn off small appliances with a touch of your fingertip. You can even use Siri voice commands. Integral Apple HomeKit technology provides easy, consistent control of any compliant devices connected to iHome SmartPlugs.
- * **Eve Energy Strip - Connected Triple Outlet** - \$99.95
Eve Energy Strip lets you individually control three outlets—and the connected appliances—with the app on your iPhone or via Siri. Rest assured that your appliances are safeguarded by overcurrent, overvoltage, and surge protection. Plus, you can track their combined power consumption.

Sprinklers

Able to replace your “dumb” controller with an Apple Home kit accessible controller.

- **The ēdn SmallGarden** - \$199.95
The ēdn Wi-Fi powered SmallGarden delivers the optimal light and food to give your plants everything they need to thrive. Combined with the ēdn app, you can seamlessly manage the lighting schedule, see garden alerts, and get detailed guidance on the growth of your plants to help you go from planting to harvest and beyond. The SmallGarden is built for the smart home of the future.
- **Eve Aqua Smart Water Controller** - \$99.95
The Eve Aqua Smart Water Controller turns your outdoor faucet into an intelligent water outlet that you can automatically activate or shut off via your iPhone, Siri, or the onboard button. Set schedules to automate your irrigation system. Plus see how much water you're using. Eve Aqua leverages the power of HomeKit and connects directly to your iPhone or iPad using Bluetooth low-energy technology.
- * **Rachio 3 Smart Sprinkler Controller** - 8-zone \$229.95, 16-zone \$279.95
Extending your smart home into the yard, the Rachio 3 Sprinkler Controller helps you effectively manage your outdoor watering. Rachio can also monitor local climate and alter automatic watering schedules accordingly to save water and money.
Highly rated sprinkler controller.
Works with Weather for amount of watering.
Optional in-line water flow meter that monitors flow rate and leak detection.

Pricey, about \$150 more than a “non-homekit” version which is still WiFi accessible.

Sensors

Wide variety: Weather, Air quality, water guard, window & door sensors, motion.

- * **Eve Door & Window Wireless Contact Sensor** - \$39.95 (3-pack \$99.95)
Eve Door & Window can sense whether your door or window is open or closed and share that data with the app on your iPhone or iPad. Equip it to automatically control other HomeKit-enabled accessories throughout your home. And receive notifications while you're on the go, courtesy of your ever-present home hub.
Install needs to consider battery changes, number of spacers on sensor. VERY strange battery size not easily purchased, battery cover very tight and may cause device to release from double stick tape.
Logs open & closes, but does not provide sound on opening only a phone notification that needs push on.
Sensors may not report correct position (open or closed)(both false positives and negatives).
may need an extender for bluetooth range.
- **Eve Motion Wireless Motion Sensor** - \$49.95
The Eve Motion sensor lets you bring your home to life simply by walking into a room. It accurately detects movement, so you can automatically set scenes and control your connected accessories when you enter or exit. Eve also gives you the advantage of compatibility with Apple HomeKit technology, which delivers ease of use, advanced security, and tight integration with Siri. And because Eve Motion connects directly to your iPhone or iPad using Bluetooth low-energy technology, there's no need for additional wiring or a hub, gateway, or bridge.
- **FIBARO Flood Sensor** - \$49.95
The FIBARO Flood Sensor is a wireless battery-operated water and temperature sensor that detects and alerts you of water leaks as well as changes in temperature. You can also use Siri Voice Control to check the status of the device or even ask what the temperature is in the sensor's location.
- **Philips Hue Outdoor Motion Sensor** - \$49.95
Philips Hue Outdoor Motion Sensor lets you control your outdoor lights automatically*—simply walk by to trigger them. It's battery powered and completely wireless, so you can place the sensor anywhere.
- **Eve Water Guard** - \$79.95
Eve Water Guard detects water leaks and alerts you the moment they occur – visually, audibly, and via an app on your iPhone. Now you can enjoy complete peace of mind knowing that no water is leaking in the

cabinet beneath your water pipes. And keep a watchful eye on the basement, even though you don't go there that often. The Eve app even reminds you at regular intervals to check that Eve Water Guard is working perfectly.

- **Eve Room Indoor Air Quality Monitor** - \$99.95
Eve Room Indoor Air Quality Monitor gives you an at-a-glance view on your iPhone or iPad of the air quality, temperature, and humidity inside your home. Compact and crafted to perfection, Eve Room is HomeKit-enabled and features all-new precision sensor technology and a customizable display surrounded by a sleek aluminum body. It puts vital insight at your fingertips so you can make healthier choices.
- **Eve Weather** - \$69.95
With Eve Weather, you can track your current outdoor temperature, humidity and barometric pressure, and see the weather trend at a glance – on your iPhone or directly on the display. Review current and past climate data, empowering you with insights of the weather on your doorstep.
- **First Alert Onelink Smart Smoke and Carbon Monoxide Alarm** - \$119.95
With the First Alert Onelink Smart Smoke and Carbon Monoxide Alarm, you can add advanced protection to your home and get peace of mind with smart notifications in the event of an emergency. Conveniently designed to be tested or silenced from your phone, it requires no battery replacements, and lasts up to 10 years. It also speaks to tell you what the danger is and where it is located within the home.

Switches

- **Wemo Smart Light Switch (3-Way)** - \$49.95
The Wemo Smart Light Switch (3-Way) gives you total control over your lights with no subscription or hub required. Turn lights on and off from the wall, the app on your iPhone or iPad, or with your voice using Siri (thanks to Apple HomeKit support). You can install this 3-way Light Switch almost anywhere and you can control nearly anything that uses a traditional light switch—from porch lights to ceiling fans to recessed lighting. It only requires one Smart Light Switch per 3-way circuit.
- * **Lutron Caséta Wireless In-Wall Light Dimmer with Remote** - \$64.95
The Lutron Caséta Wireless in-wall light dimmer and Pico remote control give you the convenience of setting the right light for any activity — bright for reading or dim for entertaining — from anywhere in a room using the handheld Pico remote control. For added versatility, you can mount the Pico onto a tabletop pedestal (sold separately) or directly to the wall.
Requires separate purchase of Smart Bridge (a bridge and 2 switches cost \$190).

Pricy for control of two installed lights.

Belkin WeMo switches (no dimmer) much cheaper, but with less functionality.

- **FIBARO Button Multicontroller** - \$49.95

With a simple tap, the Fibaro Button lets you control various HomeKit-enabled devices such as lighting, fans, window shades, and locks. You can also run scenes, triggering them with one tap, two taps, or by holding the button down.

- **Eve Light Switch** - \$49.95

The Eve Light Switch gives you the comfort and convenience of switching your lights on and off using Siri or with a quick tap on your iPhone.

Thermostat

Wide range of choices, going with the new group who are electronic or the old group who have done thermostats for decades.

- * **ecobee3 lite Smart Thermostat** - \$169.95

The ecobee3 lite Smart Thermostat and its companion app on your iPhone or iPad help you live better, while reducing your annual heating and cooling expenses.

HomeKit enabled programmable thermostat .

Pricier than other programmable thermostats but less expensive than true Smart ones.

No activity tracking sensors or other adaptive tech which learns your routine

No “geofencing.” (Geofencing allows for automatic control based on proximity of iPhone to the home.)

Can add Smart Sensors (determines where you are and adjusts temp to that sensor) but pricey.

Add a sensor in each room to be warm. It uses the temp in that room, and all the others get the heat as well!

More

<https://www.apple.com/ios/home/accessories/>

<https://www.apple.com/shop/accessories/all>

End

