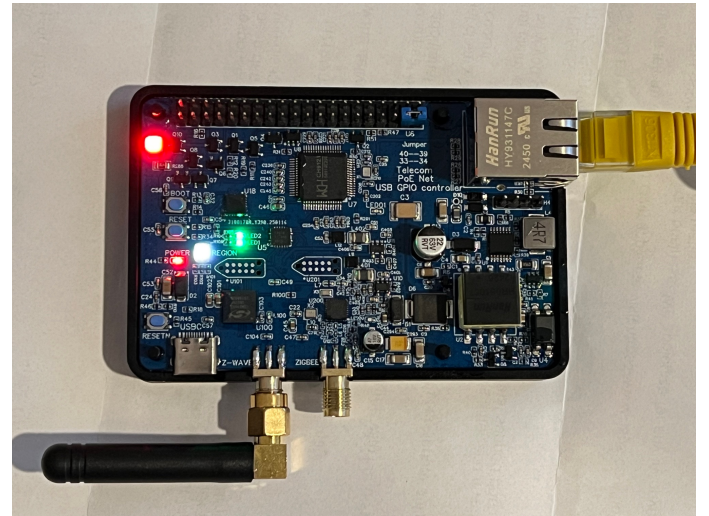


智能家居系统



公司简介

Wise Connect Technologies Corporation 成立于 2012 年，是一家专业研究开发智能控制技术公司。产品有分布式大型智能系统，可以集中控制整栋楼甚至整个社区、整座城市。

系统介绍

智能家居系统是一种可以智能地控制家庭、办公楼、医院、学校等建筑物和场所的电子系统。理想的智能家居系统应该能够理解和预测人类的要求和想法并能执行相关设备的系统，目前，Wise Connect Technologies Corporation 的智能家居系统可以完成部分的智能控制，虽然离理想的系统还有不小的差距，但目前仍然是世界上最先进的系统。

智能家居系统有三十多年的历史，从最早的 X10，UPB，到 Insteon，ZigBee，Z-Wave。智能家居系统也从最初的红外遥控，电力线载波到现代的无线电以及 Ad-Hoc 传感器网络等现代组网技术。但是光有这些组网技术是不够的，整个系统的可靠性、安全性以及作为智能系统最重要的智能技术才是重中之重。就是系统不需要人为的干预，自动作出反应并将结果通知主人。我们的系统在智能、人机交互以及媒体带宽适配方面作了一些有益的探索。

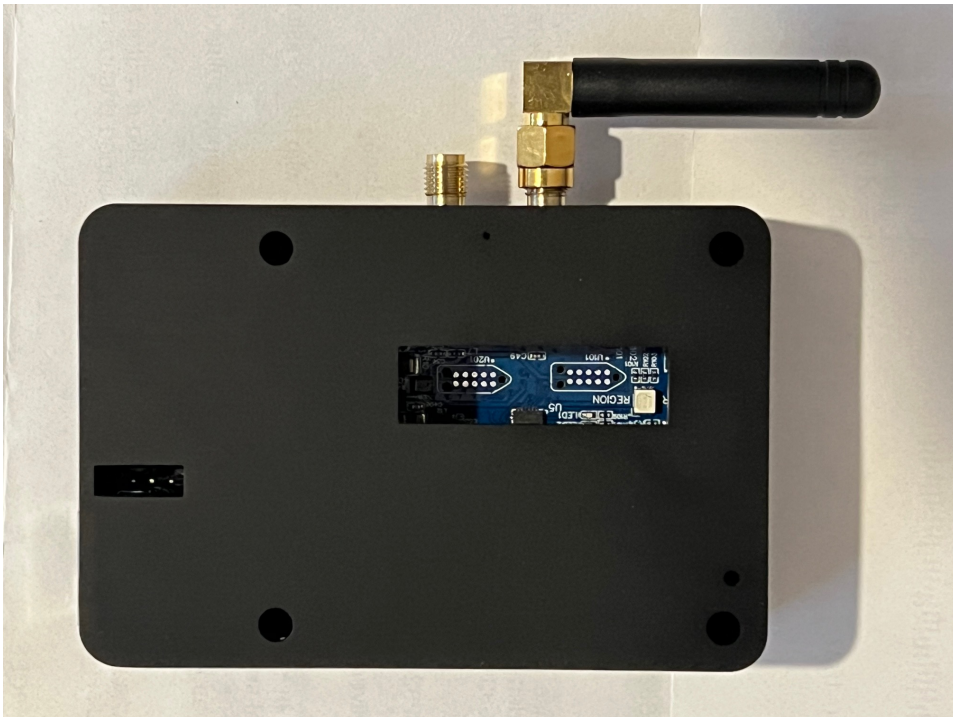


硬件系统

硬件系统由控制服务器、介面技术设备等组成控制系统，我们的控制服务器可以灵活配置，从便宜低耗电的 Raspberry Pi 到数据中心的大型服务器，取决于智能家居系统的规模。这是一个有几百个家居设备的控制服务器。控制服务器通过设置还可以是一个无线路由器。



我们还有世界上独特的网络界面技术设备，支持 Z-Wave Plus, ZigBee 等技术，并且可以各种技术混合交互控制，可以支持万里之外的远程交互控制，这是一个 Z-Wave Plus 的网络界面设备。



HOME VIEW TOOLS PLUG-INS ?

+ Z-Wave Networks and Options

Z-Wave Interfaces

Name: Sigma Z-Wave Plus

This is the MAIN interface for this Home ID of DC2BC005

Name: Sigma Z-Wave Plus Interface Model: Generic Serial Controller Serial Port: /dev/ttyACMO

Actions:

ID: 980CD3A09A23

+ Controller Node Information:

Add Interface

Home | Device Status | Device Management | Events | Log | Setup | Global Elements | Control Panel | Manage Plug-ins | About

Installed Plug-ins Developer Mode

Plug-In	Instance	Enable	COM Port	Version	Update	License (click to change)	Plug-in Status
BOESoundTouch			N/A	3.8.0.0	N/A	Trial with 30 days left. Register Online	OK
HSTouch Server			N/A	3.0.0.68	N/A	Included	OK
Sonos	See plug-in config		N/A	3.1.0.20	N/A	Included	OK
Z-Wave			N/A	3.0.1.124	N/A	Included	OK

Remote Plug-Ins

Getting 3rd party information...

+ Additional Interfaces [Update Listing](#)

Home | Device Status | Device Management | Events | Log | Setup | Global Elements | Control Panel | Manage Plug-ins | About

例如，你可以用一个 ZigBee 的传感器去触发并控制一个 Z-Wave 的设备，也可以用一个北京的传感器去触发控制一个纽约的一个设备或者一系列事件。

传感器和控制设备以及音像设备

目前市场上有非常丰富的各种设备，有 ZigBee, Z-Wave, Insteon, X10 以及 UPB 等，目前最丰富的是 Z-Wave 设备。先来说说音响。

我们的系统方便的控制 Bose SoundTouch, Sonos 等设备。

Bose SoundTouch



系统界面：

<input type="checkbox"/>		On	BOSESoundTouch	BOSESoundTouch	SoundTouch Power 10.0.1.152	Today 5:06:27 PM	Off On
<input type="checkbox"/>		Volume: 34	BOSESoundTouch	BOSESoundTouch	SoundTouch Volume 10.0.1.152	Today 5:06:36 PM	- <input type="text" value="34"/> +
<input type="checkbox"/>		Off	BOSESoundTouch	BOSESoundTouch	SoundTouch Mute 10.0.1.152	Today 4:41:44 PM	Off On
<input type="checkbox"/>		PANDORA	BOSESoundTouch	BOSESoundTouch	SoundTouch Source 10.0.1.152	Today 5:06:27 PM	AUX WKDM AM 1380 Maroon 5 Radio Today's Hits Radio Today's Adult Hits Radio Monster Cat Radio
<input type="checkbox"/>		http://mediaserver-cont-dc6-1-v4v6.pandora.com/images/public/int/5/8/8/2/00602	BOSESoundTouch	BOSESoundTouch	SoundTouch Source Art 10.0.1.152	Today 5:06:27 PM	
<input type="checkbox"/>		Human	BOSESoundTouch	BOSESoundTouch	SoundTouch Track 10.0.1.152	Today 5:06:48 PM	Previous Next Shuffle Off Shuffle On Repeat Off Repeat One Repeat All
<input type="checkbox"/>		Rag'n'Bone Man	BOSESoundTouch	BOSESoundTouch	SoundTouch Artist 10.0.1.152	Today 5:06:48 PM	
<input type="checkbox"/>		Human (Deluxe)	BOSESoundTouch	BOSESoundTouch	SoundTouch Album 10.0.1.152	Today 5:06:48 PM	
<input type="checkbox"/>		Today's Hits Radio	BOSESoundTouch	BOSESoundTouch	SoundTouch Station Name 10.0.1.152	Today 5:06:27 PM	
<input type="checkbox"/>			BOSESoundTouch	BOSESoundTouch	SoundTouch Description 10.0.1.152	Today 4:41:44 PM	
<input type="checkbox"/>			BOSESoundTouch	BOSESoundTouch	SoundTouch Station Location 10.0.1.152	Today 4:41:44 PM	
<input type="checkbox"/>		IMAGE_PRESENT	BOSESoundTouch	BOSESoundTouch	SoundTouch Art Status 10.0.1.152	Today 5:06:49 PM	
<input type="checkbox"/>		http://mediaserver-cont-sv5-3-v4v6.pandora.com/images/public/int/0/1/5/8/88644	BOSESoundTouch	BOSESoundTouch	SoundTouch Art Url 10.0.1.152	Today 5:06:49 PM	










Sonos



系统界面：

Device List

Display Filters: **Floor** Room Device Type Show All

Status	Floor	Room	Name	Last Change	Control
<input type="checkbox"/>  Playing Pandora - Sit Still, Look Pretty Radio Here Alessia Cara Know-It-All	Sonos	Living Room	Player	Today 5:04:09 PM	Play Stop Pause Prev Next Shuffle Repeat Vol - Dn Vol - Up Mute Bal - Left Bal - Right Loudness
<input type="checkbox"/> Here	Sonos	Living Room	Track	Today 5:03:16 PM	
<input type="checkbox"/> Most Girls	Sonos	Living Room	Next Track	Today 5:03:16 PM	
<input type="checkbox"/> Alessia Cara	Sonos	Living Room	Artist	Today 5:03:16 PM	
<input type="checkbox"/> Hailee Steinfeld	Sonos	Living Room	Next Artist	Today 5:03:16 PM	
<input type="checkbox"/> Know-It-All	Sonos	Living Room	Album	Today 5:03:16 PM	
<input type="checkbox"/> Most Girls (Single)	Sonos	Living Room	Next Album	Today 5:03:16 PM	
<input type="checkbox"/>  /images/Sonos/Artwork/CoverRINCON_B8E93	Sonos	Living Room	Art	Today 5:04:09 PM	
<input type="checkbox"/>  /images/Sonos/Artwork/NextCoverRINCON_B	Sonos	Living Room	Next Art	Today 5:03:16 PM	
<input type="checkbox"/>  Playing	Sonos	Living Room	State	Today 4:36:59 PM	Stop Play Pause Play-Pause
<input type="checkbox"/> Volume 44%	Sonos	Living Room	Volume	Today 4:37:05 PM	Down  Up
<input type="checkbox"/>  Unmuted	Sonos	Living Room	Mute	Today 4:31:27 PM	Off On Toggle
<input type="checkbox"/>  Loudness Off	Sonos	Living Room	Loudness	Today 4:31:27 PM	Off On Toggle
<input type="checkbox"/> Balance L (-100) <-> R (+100) : 0	Sonos	Living Room	Balance	Today 4:31:27 PM	Down  Up
<input type="checkbox"/> 00:03:19	Sonos	Living Room	Track Length	Today 5:03:15 PM	
<input type="checkbox"/> 00:02:44	Sonos	Living Room	Track Position	Today 5:04:36 PM	Down  Up
<input type="checkbox"/> Sit Still, Look Pretty Radio	Sonos	Living Room	Radiostation Name	Today 4:36:58 PM	

再来看看门锁：



系统界面：

<input type="checkbox"/>	No Status	First Floor	Living Room	Front Door Lock		
<input type="checkbox"/>	100%	First Floor	Living Room	Front Door Lock Battery	5/31/2017 4:33:23 PM	
<input type="checkbox"/>	Unlocked	First Floor	Living Room	Front Door Lock	Today 9:22:26 AM	Unlock Lock
<input type="checkbox"/>	(Not Set)	First Floor	Living Room	Front Door Lock Logging		Get Latest Record
<input type="checkbox"/>	Unlocked by Lever	First Floor	Living Room	Front Door Lock Notification	Today 9:22:26 AM	

传感器：



系统界面：

<input type="checkbox"/>	 No Status	Basement	Basement	Basement On/Off Sensor		
<input type="checkbox"/>	 100%	Basement	Basement	Basement Motion Sensor Battery	5/20/2017 9:39:11 AM	
<input type="checkbox"/>	 No Motion	Basement	Basement	Basement Motion Sensor	Today 12:13:51 AM	
<input type="checkbox"/>	 66.2 F	Basement	Basement	Basement Temperature	Today 2:38:45 PM	
<input type="checkbox"/>	 0 Lux	Basement	Basement	Basement Luminance	Today 1:38:44 PM	
<input type="checkbox"/>	 47 %	Basement	Basement	Basement Relative Humidity	Today 2:08:44 PM	

可燃气体及漏水传感器以及阀门控制,水表煤气表：










系统界面：

电量开关：





系统界面：

<input type="checkbox"/>	 No Status	Basement	Basement	Main Power Energy Switch		
<input type="checkbox"/>	 115.169 kW Hours	Basement	Basement	Main Power kW Hours	Today 9:20:01 AM	Reset Accumulated Values
<input type="checkbox"/>	 154.393 Watts	Basement	Basement	Main Power Watts	Today 9:19:50 AM	
<input type="checkbox"/>	 242.053 Volts	Basement	Basement	Home Power Volts	Today 9:14:52 AM	
<input type="checkbox"/>	 1.462 Amperes	Basement	Basement	Home Power Amperes	Today 9:19:13 AM	
<input type="checkbox"/>	 85.1 F	Basement	Basement	Main Power Switch Temperature	Today 9:14:49 AM	
<input type="checkbox"/>	 On	Basement	Basement	Main Power Switch	5/30/2017 3:03:23 PM	Off On

室内传感器：

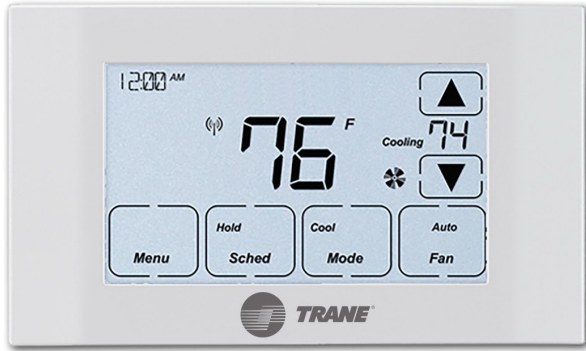


系统界面：

<input type="checkbox"/>	 No Status	Basement	Basement	Basement On/Off Sensor		
<input type="checkbox"/>	 100%	Basement	Basement	Basement Motion Sensor Battery	5/20/2017 9:39:11 AM	
<input type="checkbox"/>	 No Motion	Basement	Basement	Basement Motion Sensor	Today 2:51:29 PM	
<input type="checkbox"/>	 66 F	Basement	Basement	Basement Temperature	Today 3:38:46 PM	
<input type="checkbox"/>	 1 Lux	Basement	Basement	Basement Luminance	Today 3:50:46 PM	
<input type="checkbox"/>	 48 %	Basement	Basement	Basement Relative Humidity	Today 3:50:44 PM	

中央空调暖气控制器

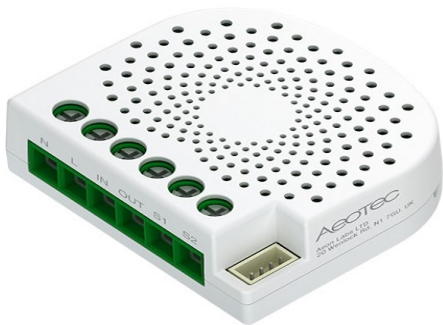




系统界面：

<input type="checkbox"/>	No Status	First Floor	Z-Wave	First Floor Thermostat		
<input type="checkbox"/>	68 F	First Floor	Hallway	Temperature	Today 2:48:31 PM	
<input type="checkbox"/>	On	First Floor	Hallway	Fan Mode	6/4/2017 1:04:29 AM	<input type="button" value="Auto"/> <input type="button" value="On"/>
<input type="checkbox"/>	On	First Floor	Hallway	Fan State	5/20/2017 9:39:08 AM	
<input type="checkbox"/>	Off	First Floor	Hallway	Mode	6/4/2017 8:45:32 AM	<input type="text" value="Off"/>
<input type="checkbox"/>	Idle	First Floor	Hallway	Operating State	5/30/2017 8:48:23 AM	
<input type="checkbox"/>	70 F	First Floor	Hallway	Heating Setpoint	5/29/2017 3:17:57 PM	(value) F <input type="text" value="70"/> <input type="button" value="Submit"/>
<input type="checkbox"/>	74 F	First Floor	Hallway	Cooling Setpoint	5/20/2017 9:58:13 AM	(value) F <input type="text" value="74"/> <input type="button" value="Submit"/>

电量开关：



系统界面：

<input type="checkbox"/>		No Status	First Floor	Family Room	Family Room Lights		
<input type="checkbox"/>		0.964 kW Hours	First Floor	Family Room	kW Hours	Yesterday 11:41:49 PM	Reset Accumulated Values
<input type="checkbox"/>		0 Watts	First Floor	Family Room	Family Room Lights Watts	Today 11:56:26 AM	
<input type="checkbox"/>		123.187 Volts	First Floor	Family Room	Family Room Volts	Today 4:35:29 PM	
<input type="checkbox"/>		0.005 Amperes	First Floor	Family Room	Family Room Lights Amperes	Today 4:32:13 PM	
<input type="checkbox"/>		Off	First Floor	Family Room	Family Room Lights	Yesterday 11:34:38 PM	Off On

草地灌溉系统：



系统界面：

<input type="checkbox"/>		No Status	Basement	Basement	GoControl Irrigation Controller		
<input type="checkbox"/>		No Event	Basement	Basement	Irrigation Notification		
<input type="checkbox"/>		On	Basement	Basement	Irrigation System	Today 4:28:11 PM	Off On
<input type="checkbox"/>		Valve 3 On for 10 min	Basement	Basement	Irrigation Valve	Today 7:50:00 PM	Valve 3 On for 10 min

电饭锅：



系统界面：

<input type="checkbox"/>	No Status	First Floor	Z-Wave	Rice Cooker Switch Binary		
<input type="checkbox"/>	1.949 kW Hours	First Floor	Z-Wave	kW Hours	Today 7:21:18 PM	Reset Accumulated Values
<input type="checkbox"/>	0 Watts	First Floor	Kitchen Room	Rice Cooker Watts	Today 7:17:18 PM	
<input type="checkbox"/>	0 W	First Floor	Z-Wave	Power	Today 7:17:18 PM	
<input type="checkbox"/>	Off	First Floor	Kitchen Room	Rice Cooker Switch	6/1/2017 9:41:47 PM	Off On

<input type="checkbox"/>	No Status	First Floor	Kitchen Room	Refrigerator Switch		
<input type="checkbox"/>	190.115 kW Hours	First Floor	Kitchen Room	kW Hours	6/1/2017 6:12:44 PM	Reset Accumulated Values
<input type="checkbox"/>	188.572 Watts	First Floor	Kitchen Room	Refrigerator Watts	Today 4:35:24 PM	
<input type="checkbox"/>	0	First Floor	Kitchen Room	Power		
<input type="checkbox"/>	On	First Floor	Kitchen Room	Refrigerator Switch	5/22/2017 3:30:02 PM	Off On

电表功能：

<input type="checkbox"/>	No Status	Basement	Basement	House Multilevel Sensor		
<input type="checkbox"/>	33.658 kW Hours	Basement	Basement	kW Hours 2	Yesterday 11:16:25 AM	Reset Accumulated Values
<input type="checkbox"/>	660.990 Watts	Basement	Basement	Phase 2 Watts	Yesterday 11:17:07 AM	
<input type="checkbox"/>	100%	Basement	Basement	House Sensor Battery	5/31/2017 10:21:09 AM	
<input type="checkbox"/>	54.642 kW Hours	Basement	Basement	kW Hours 1	Yesterday 11:16:27 AM	Reset Accumulated Values
<input type="checkbox"/>	421.520 Watts	Basement	Basement	Phase 1 Watts	Yesterday 11:17:10 AM	
<input type="checkbox"/>	1090.43 W	Basement	Basement	House Power	Yesterday 11:17:08 AM	

车库控制

<input type="checkbox"/>	No Status	First Floor	Living Room	Garage Control Switch		
<input type="checkbox"/>	0	First Floor	Living Room	Meter Pulse		
<input type="checkbox"/>	No Notification	First Floor	Living Room	Notification		Reset Notifications
<input type="checkbox"/>	On-Open-Motion	First Floor	Living Room	Garage Remote	Today 4:05:26 PM	
<input type="checkbox"/>	0	First Floor	Living Room	General Purpose		
<input type="checkbox"/>	Off	First Floor	Living Room	Garage Control Switch	Today 6:28:26 PM	Off On

安防系统：

还有很多，比如冰箱，电视，窗帘，水表等几乎所有的家居设备都能实现智能控制。

上面列举了很多设备和系统，那么是如何实现智能家居即自动控制功能的呢？

智能家居

实现智能家居的关键是根据人们的生活方式和习惯来实现家居设备的自动控制，因此是否连接互联网并不重要，家庭的安全可靠以及舒适节能最重要。支持语音控制，比如Google， Siri， echo 。

我们的系统恰恰在这些方面走在了前列，我们利用一系列传感器来监测家庭生活的细节，从而利用大量这些数据来控制家居设备从而达到智能的目的。

我们的系统具有强大的可扩展功能，因此可以控制整栋楼甚至一个社区一座城市。并且可运营可租赁。





举例：





The screenshot displays a smart home automation interface with two event rules for a basement dehumidifier. Each rule is structured as follows:

- Event Name:** Basement Dehumidifier (top rule) and Turn off Dehumidifier (bottom rule).
- Type:** Comfort (selected for both).
- Group Reassign:** Basement Humidity (selected for both).
- IF:** Basement Basement Basement Relative Humidity was set and has a value that is greater than 50 % (top rule) and Basement Basement Basement Relative Humidity was set and has a value that is less than 40 % (bottom rule).
- Then:** Set Device Basement Basement Dehumidifier Switch to On (top rule) and Set Device Basement Basement Dehumidifier Switch to Off (bottom rule).

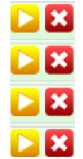
Each rule includes a play button, a checkmark, a delete button, and an add button. An 'Options >' link is visible below each rule.

0 **Event Name:** Doo, Lock Code **Type:** user code **Group Reassign:** Home Security  

IF The time is at 7:00 :00 AM
THEN  Z-Wave Actions 
Network: C6B8F3*1F (Network C6BBF34F) 
Set Security UserCode 
Oolose A D Device:

THEN  Z-Wave Actions 
Network: C6B8E34F (Network C6BBF34F) 
Set Security User Code 
Oolose A D Device:

Then Set user code **1** on device **First floor Living Room Front Door Lock** to the **8** digit code provided. **Then**
en Set user code **2** on device **First Floor Living Room Front Door Lock** to the **8** digit code provided. **Then**
Set user code **3** on device **First Floor Living Room, Front Door Lock** to the **8** digit code provided. **Then**
user code **4** on device **First floor Living Room, Front Door Lock** to the **8** digit code provided.



Event Name: Nature Gas **Type:** Dangerous  **Group Reassign:** Home Security  

IF First Floor Kitchen Room Natlfire Gas Sensor Status changes and becomes On-Open-Motion
Then Set Device First Floor Kitchen Room Kitchen Gas Valve to Off



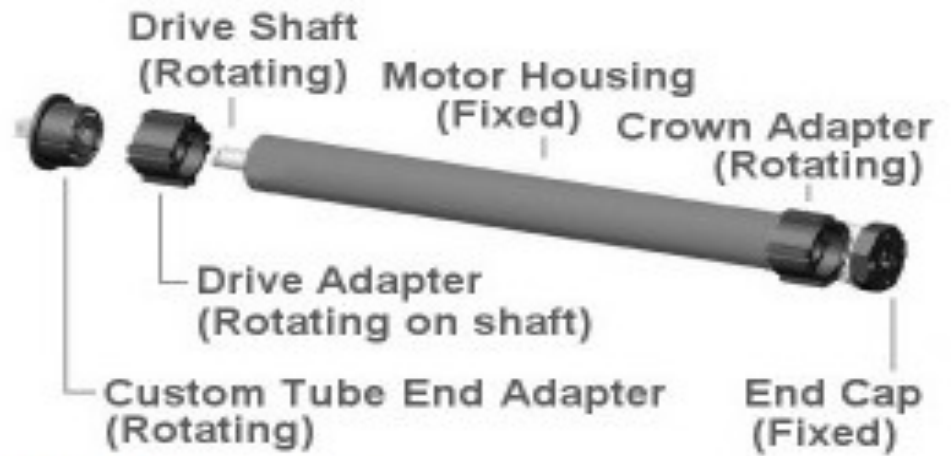
EventName: Water Leak **Type:** Dangerous **Group Reassign:** Home Security  

IF Basement Basement Water Sensor Binary changes and becomes On-Open-Motion
OR IF Second Floor Second Bathroom Sensor Binary changes and becomes On-Open-Motion
Then Set Device Basement Basement Main Water Valve to Off



电动窗户





Precision Electronic Remote Control Motors

Subcategories

No image available

[G Series](#)



[DIY Starter Kits](#)



[Motor Control Sensors](#)



[R Series](#)

Custom Tube Length
Slides Onto Motor



Hanger
Bracket
(Fixed)

End
Adapter
(Rotating
with tube)

Screen or
Blind Material
(retracting on
roller)

Bottom
Beam

Drive Adapter
(Rotating on shaft)

Drive Shaft
(Rotating)

Motor Housing
(Fixed)

Crown Adapter (Rotating)

End Cap

Antenna



Hanger
Bracket
(Fixed)

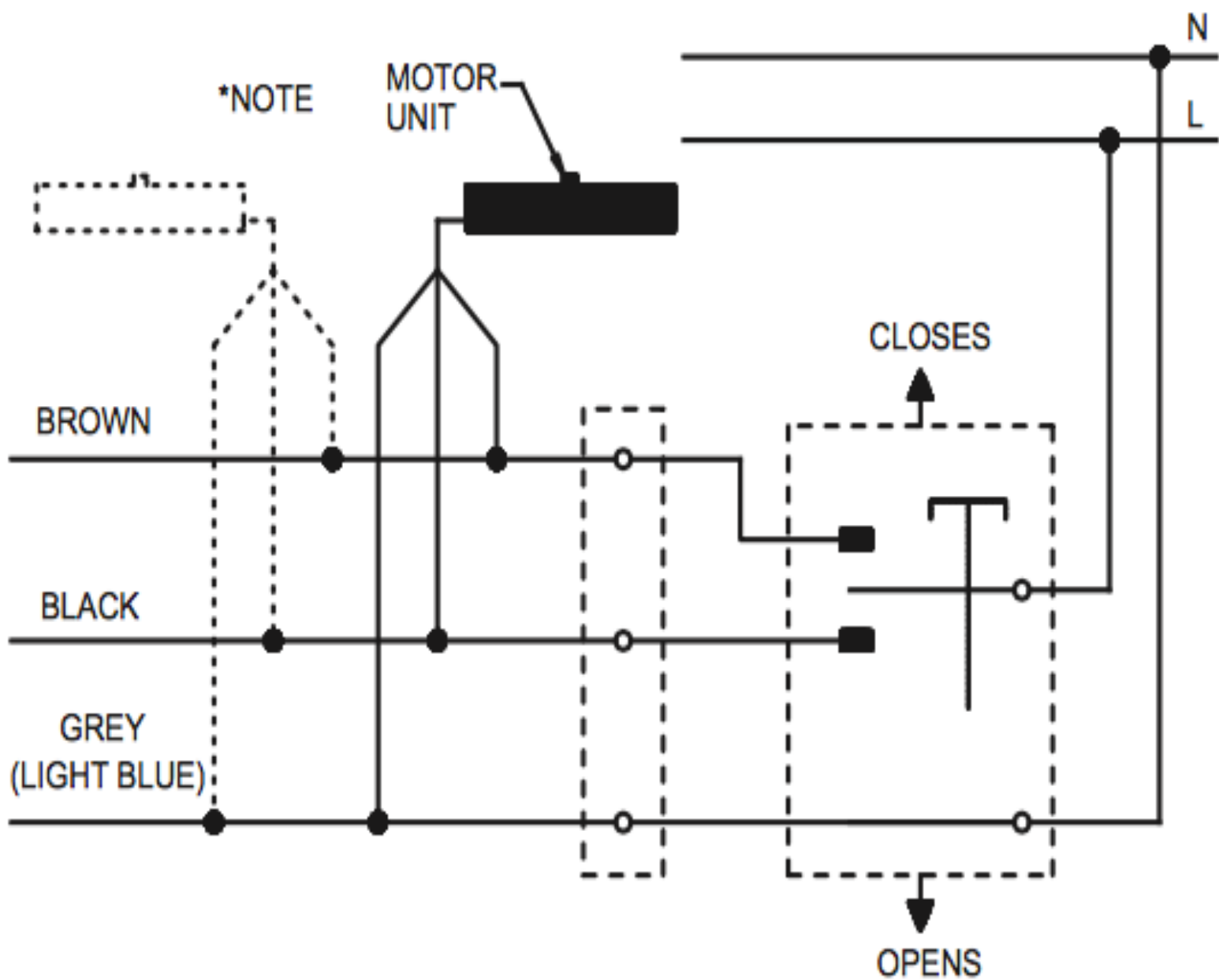
5 channel remote
controls screen AND
blackout blinds in
your media room.
Screen and blinds
can be controlled
individually or all
at once.



Solar Panel
(optional)

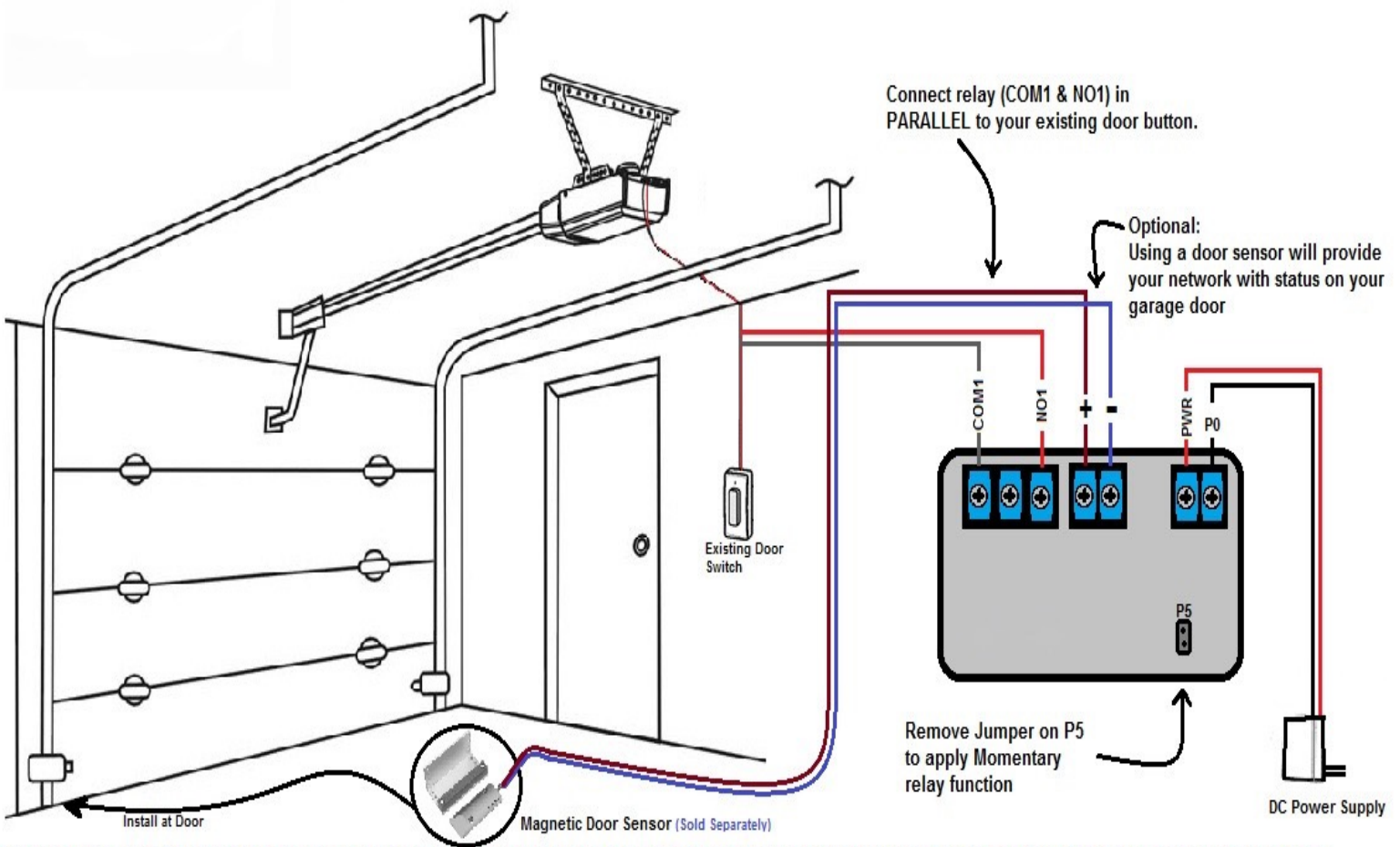
Rechargeable
Battery
(optional)

AC Power Supply
(optional)



车库门控制

Wiring Diagram for Garage Door Control



WARNING: For this application, this device is recommended **ONLY** for use with garage doors / gates that comply with the latest government safety requirements (i.e. those with automatic reversing mechanisms and electronic photo eye sensors that detect obstructions). If your garage door / gate does not have these government-mandated safety features, replace or update your garage door opener **BEFORE** attempting this application installation.

Note: Some municipalities and manufacturers recommend a Mini Sounder (Piezo) be connected that will provide audible warning prior to and during operations of the garage door / gate closer motor.

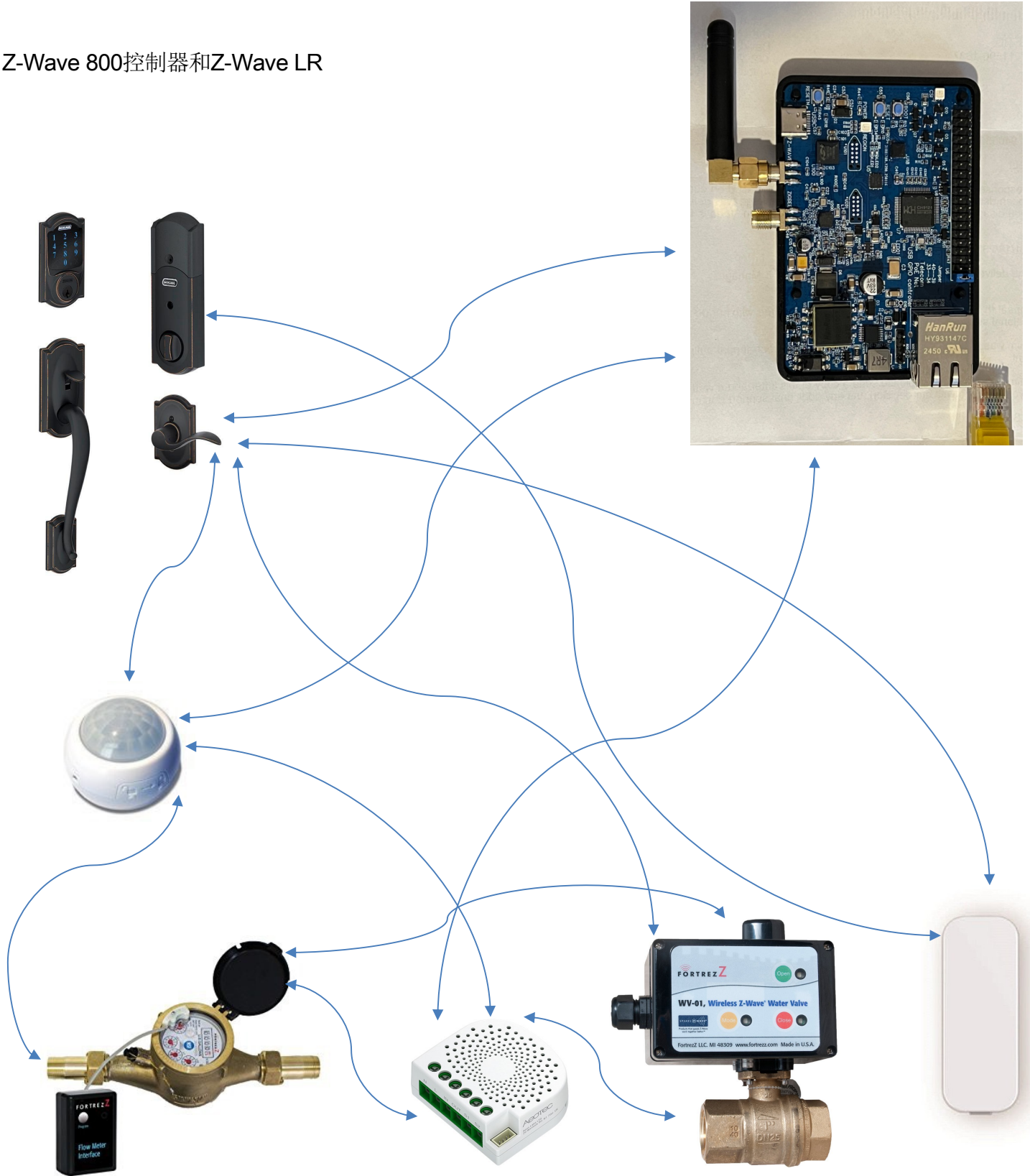
FOR MORE INFORMATION PLEASE REFERENCE THE DOCUMENTATION PROVIDED BELOW.

<http://www.cpsc.gov/en/Newsroom/News-Releases/1993/Safety-Commission-Publishes-Final-Rules-For-Automatic-Garage-Door-Openers/>

<http://www.ui325.com/>

2024年发布的产品

Z-Wave 800控制器和Z-Wave LR



Z-Wave 800技术简介

Z-Wave是世界上最受欢迎的智能家居无线协议之一，并且于2021年发布最新版本Z-Wave 800平台解决方案。截至目前，全球市场已有超过3,600款产品采用了不同版本Z-Wave平台而设计，以基于Z-Wave 500和Z-Wave 700系列的设备为例，安装基数各已经超过1亿，

Z-Wave协议概述

Z-Wave是一种开放式无线网络连接协议，用于智能家居、楼宇自动化和多住宅单元 (Multi-Dwelling Units, MDU) 中的控制、监控和状态读取应用。Z-Wave是一种成熟的、经过验证的、广泛部署的无线协议，为全球数百万人提供价格合理、可靠且易于使用的智能连接产品。我们提供的Z-Wave解决方案是一个端到端的完整解决方案，包括控制器和终端设备的软件、硬件和安全性。

关于Z-Wave平台的版本更新，2013年发布的Z-Wave 500系列模块提供了与Z-Wave Plus兼容的设备，与前一代400系列相比，具有更大的无线范围、更高的数据速率、更大的内存容量和更低的功耗。Z-Wave 700系列则于2019年发布，与500系列相比，700系列的SoC和模块具有显著的改进，如更快的无线速度、更长的电池寿命和长达1英里的无线范围。

最新于2021年推出的Z-Wave 800系列更是迄今为止Z-Wave最先进的版本。Z-Wave 800 SoC 和模块以极低的功耗，10年以上的纽扣电池寿命，超过1.5英里的无线范围，强大的安全性等实现了重大的性能飞跃。

Quick Comparison

Z-Wave 500 vs. 800

Z-Wave 700 vs. 800

Wireless Range

600 m vs. 1.5+ miles

1 mile vs. 1.5+ miles

Battery Life

1.5 years vs. 10 years

Up to 10 years in both

Security

S2 only vs. S2 + Secure Vault™

S2 only vs. S2 + Secure Vault™

Memory

Flash (module): 128 kB vs. 512 kB

Flash (SoC): 256 kB vs. 512 kB

RAM (module): 16 kB vs. 64 kB

RAM (SoC): 32 kB vs. 64 kB

Footprint

Module (mm): 8x8 vs. 6.5x6.5

Module (mm): 9x9 vs. 6.5x6.5

No SoC in Z-Wave 500

SoC (mm): 5x5 in both

Z-Wave 800技术简介

扩展无线范围

Z-Wave 800系列最根本的改进之一是扩大了无线范围。通过800系列，设备制造商可以使其产品的续航里程达到1.5英里（2,300米以上），而700系列的续航里程达到1英里（1500米以上）。在住宅、MDU和楼宇自动化应用中，扩展的范围使产品能够连接更低的网络节点数量，远离网关，并超出院子。ZG23 SoC具有独特的+20 dBm传输（TX）功率，结合了高功率输出和低功耗。

电池寿命更长

能源效率对于电池供电的物联网设备至关重要。产品耗电越少，终端用户节省的钱就越多，同时由于更换电池而产生的麻烦和浪费也就越少。无论是Z-Wave 700和800两种型号的钮扣电池都具有长达10年的电池寿命。ZG23无线SoC采用Z-Wave 800平台，与Z-Wave 700系列相比具有显著的能源优势，包括发射电流(TX)降低30%，且接收电流（RX）的效率提高了100%。

更好的安全性

Z-Wave 800和700系列都具有标准的S2安全功能。然而，800系列和ZG23和ZGM230S硬件还支持广泛的Secure Vault™功能，如安全启动（Secure Boot）、安全密钥管理、防篡改、差分功率分析(DPA)、安全调试等功能。

Z-Wave 800模块（ZGM230S）与Z-Wave 500系列相比，为设备制造商和开发人员提供了几个优势。以下是要点：

- Z-Wave 800系列的射程为1.5+英里（2,300米），而Z-Wave 500系列的射程为600米。
- Z-Wave 800系列的TX电流提高了5 mA，RX灵敏度提高了5 dBm，从而使钮扣电池的寿命长达10年（在Z-Wave 500中为1.5年）。
- Z-Wave 800模块的占位面积为6.5 x 6.5 mm，而Z-Wave 500模块则需要8 x 8 mm，因此，Z-Wave 800模块的体积要小25%。



未来趋势

重新定义协议，完成虚拟化中央控制系统。只需要一个轻控制系统比如用一个raspberry pi控制一个城市。

协议包含对设置和控制以及触发或者多个传感器、多个事件触发到每个装置的存储，协议一旦成熟将设计成芯片。

控制器电路板将包含各个国家的频率，由软件控制，包含外置天线。

