

# RTS

## Design Guide



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## What tools and parts should I have on my truck when deploying an RTS shade system?

When installing RTS shades, a best practice is to have extra parts such as extra RTS gateways, this would include both LinkPro Z's and myLinks, and an RTS repeater.

It is also a best practice to have an extra Wireless router, access points and 4G or better hot spot for advanced diagnostics or remote assistance.



It is also a best practice to have a Tellis 16 remote that can be used as a service remote.

Some dealers will save a remote just in case a service call comes up or something happens on the job site, you always have a “walking backup” of the project in this remote.

An extra RTS Decoflex and Smooove is always a good idea in case the client would like to add these options.



## Introduction

This LinkPro Z RTS Design Guide was developed for you, our Integration partner, and your clients. We have provided this simple guide to help assist in the design of a Screen Innovation wireless shade system, and to provide some best practices which can help yield the best possible performance from deployments.

**Control – your way,** at Shade Innovations we provide complete control of all your shade and screen products via both wireless and wired technologies. This guide is for wireless applications; however, we would like to add a note about wired systems. In a retrofit project you may be forced to use wireless and this guide will help you to maximize your designs for the best possible performance.

If your project is a new construction, and or you can pull wires in a retrofit project we would strongly recommend you consider this and discuss all options with your client.

While the RTS wireless technology used in our products is a proven and mature option, one that has been deployed in millions of shades all over the world we firmly believe that your designs should benefit from all the possible topologies and technologies options so that your client can make the absolute more informed and best decisions in their shade system investment.

The simple truth is that even with all the advances in wireless technologies such as Screen Innovations' RTS systems, a wired technology system provides more design choices regarding shade sizes for both width and drop as well as strength which can allow for a wider selection in fabrics and materials that can be used. Wired systems also have historically proven to provide the absolute highest levels of system performance, robustness and overall reliability.

When wired systems are not possible, the very best choice would be with our Shade Innovations RTS wireless solutions. If you and your client have selected this option, then this is the guide for you.

Shade Innovations wireless solutions offer a wide variety of options to control your shade solution from independent controls like wireless keypads to simple and elegant hand-held remotes, all of which do not need to be pointed and simply just work.



We also offer the very latest in voice control technology with popular systems like Alexa and the Google Home Assistant to the ultra-sophisticated luxury ai from Josh.



**PHILIPS**

nest

we  
mo

Google Home  
with Google Assistant



SmartThings

JUST ASK  
amazon alexa

Honeywell

ring

wink



90°



**IF** your thermostat reaches 90 degrees on a hot summer day,  
**THEN** your shades automatically lower to reduce the high demand on air conditioning. The result? Conserve energy and save money!

9:00 PM



**IF** your connected lights dim after 9pm,  
**THEN** your bedroom shades lower for privacy!



Want voice control? The Somfy myLink service in IFTTT lets you **do more with the services you love!**  
*"Hey Google, lower my bedroom shades."*



Or, execute myLink scenes and schedules with simple voice commands.  
*"Hey Google, Good Morning."*

We also work with all the popular control systems such as Control4, Savant, Crestron and more. Shade Innovations is not only our name, but it is really at the core of what we do every day. We develop innovative patent pending and state-of-the-art optics, motorization, and control technologies for both residential and commercial applications. We have also attracted some of the world's finest partners for technology co-development, and co-marketing for industry leading and exclusive product solutions for the CEDIA®, AVIXA®, and Integrated Systems markets all over the world.

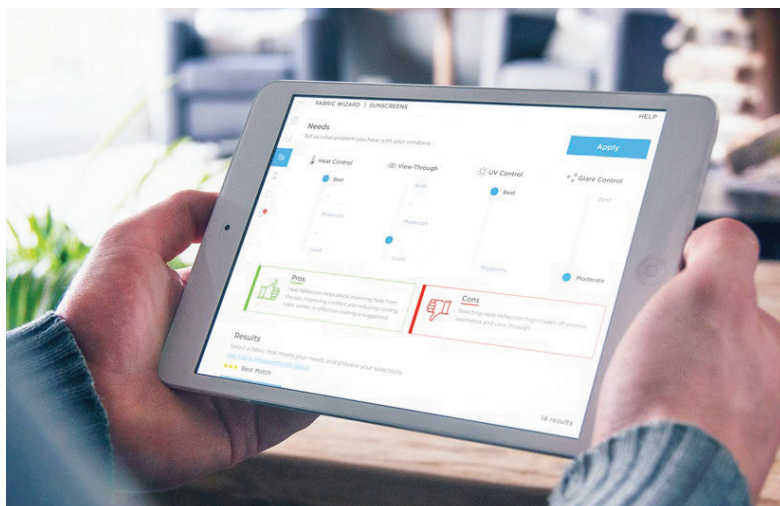
At Shade Innovations our goal is to make the experience of using technology Fun, seamless, and as invisible to the user as possible.

Our shading system motors and batteries were co-developed in an exclusive technology and partnership with worldwide leader of marketing marketing Somfy the silent motors.



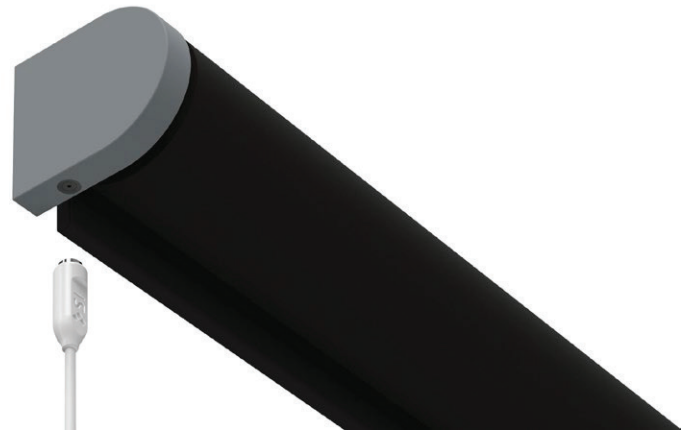
As a Shade Innovations dealer, you have access to the industry's first complete Shade Builder tool called FLOW™.

This innovative and exclusive dealer tool will help ensure your designs have everything needed to quote, sell and complete the job right the first time and every time.



## What is a Wireless Shade System?

Shade Innovations has developed a 100% wireless shade solution with state-of-the-art and patented battery powered motors with our exclusive and Patent pending break-away magnetic charging system and digital wireless control options using the proven RTS technology.



We offer both indoor shade solutions in our Nano® and Veil lines as well as exterior shade solutions with our Zen™, and Sail lines of motorized system that are all easy to design, deploy, install and use.

## What is RTS, and why does my client need it?

RTS stands for Radio Technology Somfy® and was developed by Screen Innovation's exclusive CEDIA channel partner Somfy.

The RTS technology inside Shade Innovations shade products provide the ultimate combination of luxury and performance for any lifestyle. Your client can also take advantage of automated features such as scheduling, sensor, or astronomical capabilities that can enhance or improve energy consumption, which can result in utility savings

No need to point or aim your remote or controls at the shade because RTS is a radio frequency technology using radio waves that travel through the air and can penetrate most standard construction walls.

## Does RTS interfere with other radio-controlled products or WIFI signals?

Since RTS is a radio-based technology, you might wonder if your remotes or controls will interfere with other radio-controlled products in your building or neighborhood.

The RTS technology utilizes a rolling code with 16 million combinations to ensure that the RTS communication is both safe and secure.

RTS does not interfere with any WIFI devices as well.

When using RTS in conjunction with a Lutron Radio Ra Lighting control system care must be taken with your control system programming. Both operate at the same RF frequency and while they can be deployed together you will need to add in about 200ms between common commands such as scenes or macros in which both systems are communicating.

A well-designed control system can eliminate or reduce the combination of both signals and in general this does not change the user experience of the combined systems. Contact SI technical support teams for more information on advanced integration methods.

## What frequency does RTS use?

RTS technology is transmitted on 433.42 MHz

## Do I need a gateway? What kind of gateways are available?

Currently Shade Innovations provides two RTS gateway products that you can use in your designs. In very large projects you can use multiple RTS gateways, and they can work together or work separately. You can also mix systems and use both gateways in a single system.



### Shade Innovations exclusive Link - Pro Z RTS Gateway

We highly recommend using a LinkPro Z for all your motorized shade designs wherever and whenever possible due to all the improvements in performance over previous generation RTS gateways.

This RTS gateway is PoE powered and can be plugged into any available CAT5 PoE port that is within 30' of an SI Shade, or it can be plugged

into one of the two included PoE injectors. A standard PoE 48vdc injector and 15-foot CAT 6 cable as well as a simple wall wart style injector are both included and can plug into any outlet or AC extension cable. Any PoE version switch can also be used for even more powerful administrative and remote support capabilities including PSE self-healing, PD Alive, PD scheduling and more...

LinkPro Z is designed to be ceiling mounted with the included Magnetic mount or can also be mounted on the wall with the included wall mount, or additionally they can be mounted under night stands, or in cabinets. An optional Flush Mount kit is also available.

### Is LinkPro Z an FCC certified device?

Yes, LinkPro Z is fully FCC certified and our FCC ID number is :ASVG PROLINK1.

### What makes LinkPro Z perform so well in a home?

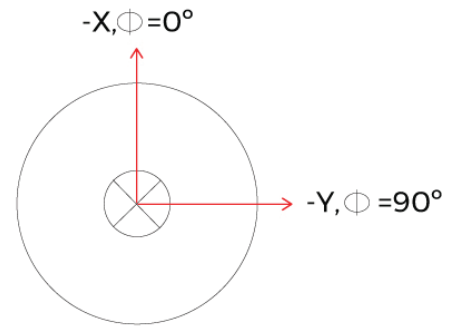
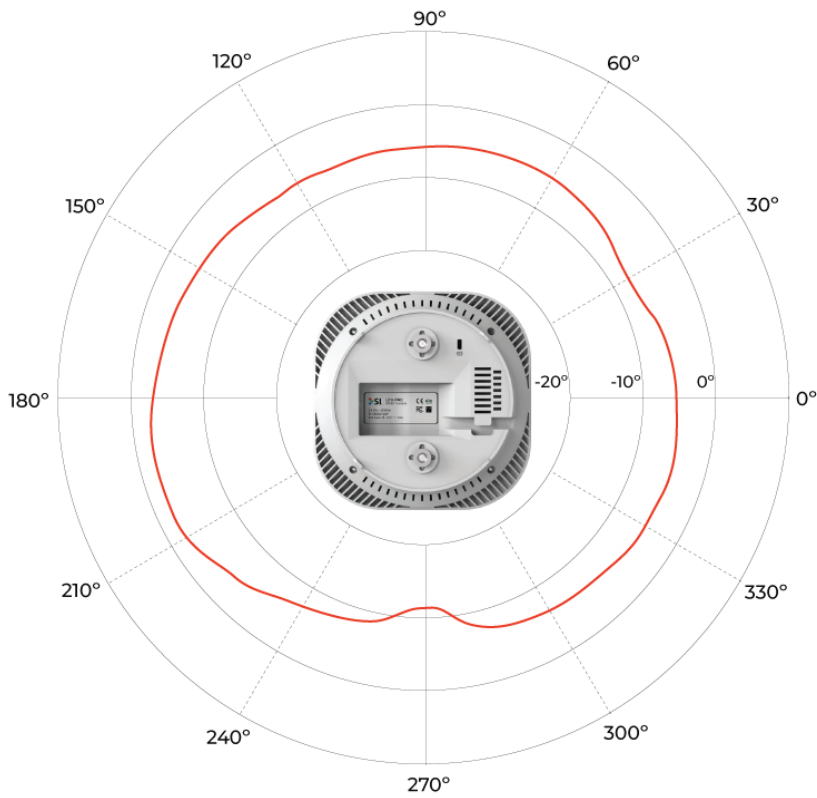
LinkPro Z has several advantages over previous generation legacy gateways starting with we removed the all AC power supplies, and any AC to DC conversion inside the enclosure, instead we use PoE 48 vdc low voltage to power the gateway. By removing the power supply and AC to DC convertor we reduce noise and interference which allow both the WIFI signals and the sub gig frequencies a much lower noise floor and this results in less re-transmitted packets, and a much faster response to control signals.

Next the LinkPro Z was designed to be installed on the ceiling which may benefit from a high location within the home significantly reducing many common houses hold items that can attenuate or interfere with WIFI and sub gig radio transmissions and reception.

LinkPro Z also benefits from being closer, and at a stronger angle of attack to where the shades are located at the top of most windows.

The LinkPro Z's antenna arrays provide a superior horizontal coverage due to the installation orientation and reduction in adjacent interference and lower noise floor.

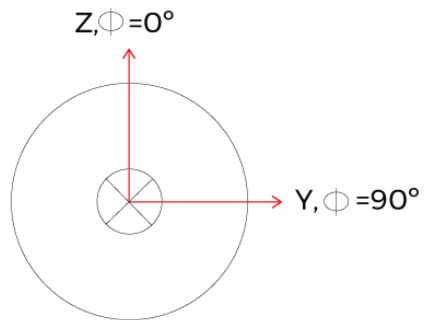
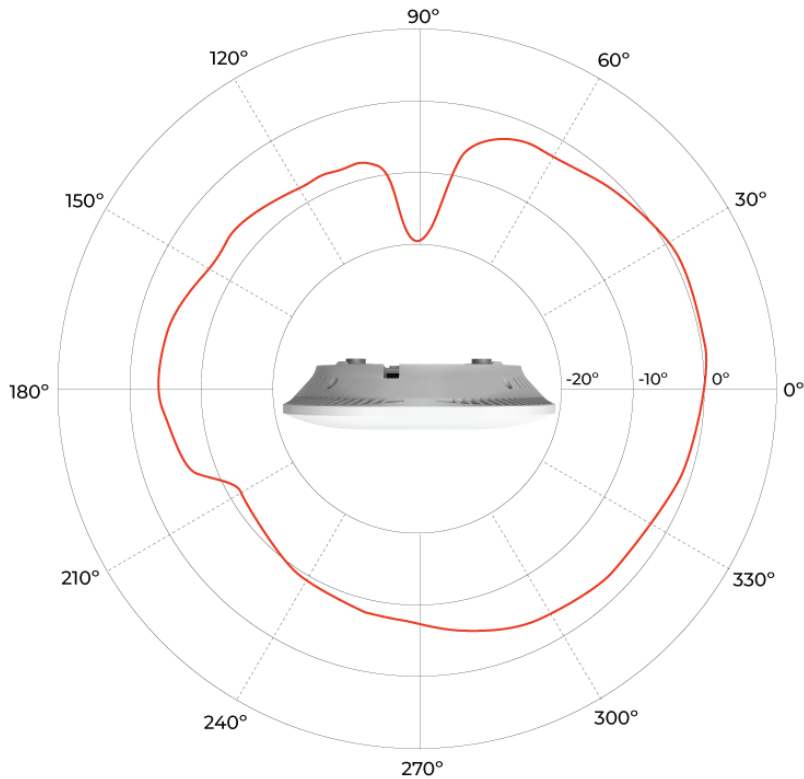




Theta =  $-90^\circ$

433.42 MHz Radiation Pattern myLink XY Plane (vertical)

433.42 MHz \_\_\_\_\_



Phi =  $90^\circ$

433.42 MHz Radiation Pattern myLink YZ Plane (horizontal)

433.42 MHz \_\_\_\_\_

## Is LinkPro Z compatible with the Somfy myLink App?

No, you would use the TaHoma to set up your 3rd party control. The myLink App was designed to work with the myLink RTS gateway.



## Somfy myLink RTS gateway

This RTS gateway is AC powered only and is designed to be plugged into any available AC outlet that is within 30' of an SI Shade. Great care should be used in the location and myLink's should NEVER be placed inside of metal racks as this would limit the RF performance of this device.

A best practice when designing myLink into new construction projects is to have the electrician locate the AC outlet in a location within the 30' of the shade(s) and possibly higher on the wall to be closer to the shades whenever possible.

It also is another best practice to use a PDU or controllable power strip where possible to enable remote monitoring and for power cycle as/if needed (could save a truck roll)



## Can I use both LinkPro Z and myLink in the same project?

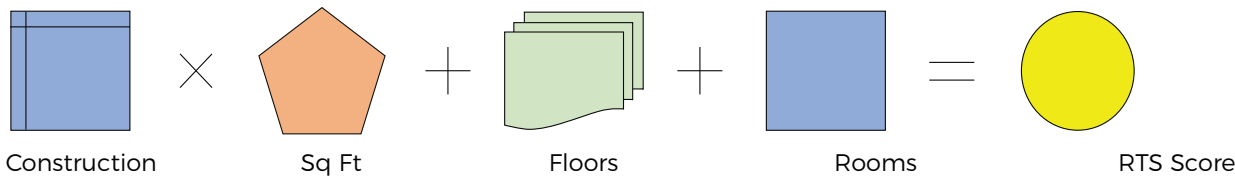
Yes, but it will require that both the TaHoma and myLink apps are setup.

**NOTE: SI recommends only using 1 of these.**

# How many RTS gateways do I need for my project design?

When designing an RTS shade system, careful attention to detail must be taken to ensure a robust and reliable system. LinkPro Z is a WIFI transceiver and therefore must be deployed in a similar fashion as you would a WIFI wireless access point.

In order to specify the correct number of gateways, we need to do some calculations about your client's house. We will call this the RTS score, and by using the below formula you can calculate the number of gateways needed.



## RTS Score Formula

| Wall & Floor Construction Value                | Square Feet Value               | Floor Value                   | Rooms with Shades                    |
|------------------------------------------------|---------------------------------|-------------------------------|--------------------------------------|
| Wood = .5                                      | < 1.5K = 1                      | 1 = 1                         | 1 = 0                                |
| BRICK/STONE = 1                                | 1.5K - 3K = 2                   | 2 = 2                         | 2 = .5                               |
| Concrete/Steel = 1.5                           | 3K - 4.5K = 3...                | 3 = 3...                      | 3 = 1                                |
| Multiply this value with square footage value. | +1 For every 1.5K of square ft. | +1 for each floor with shades | +.5 for each room over 1 with shades |

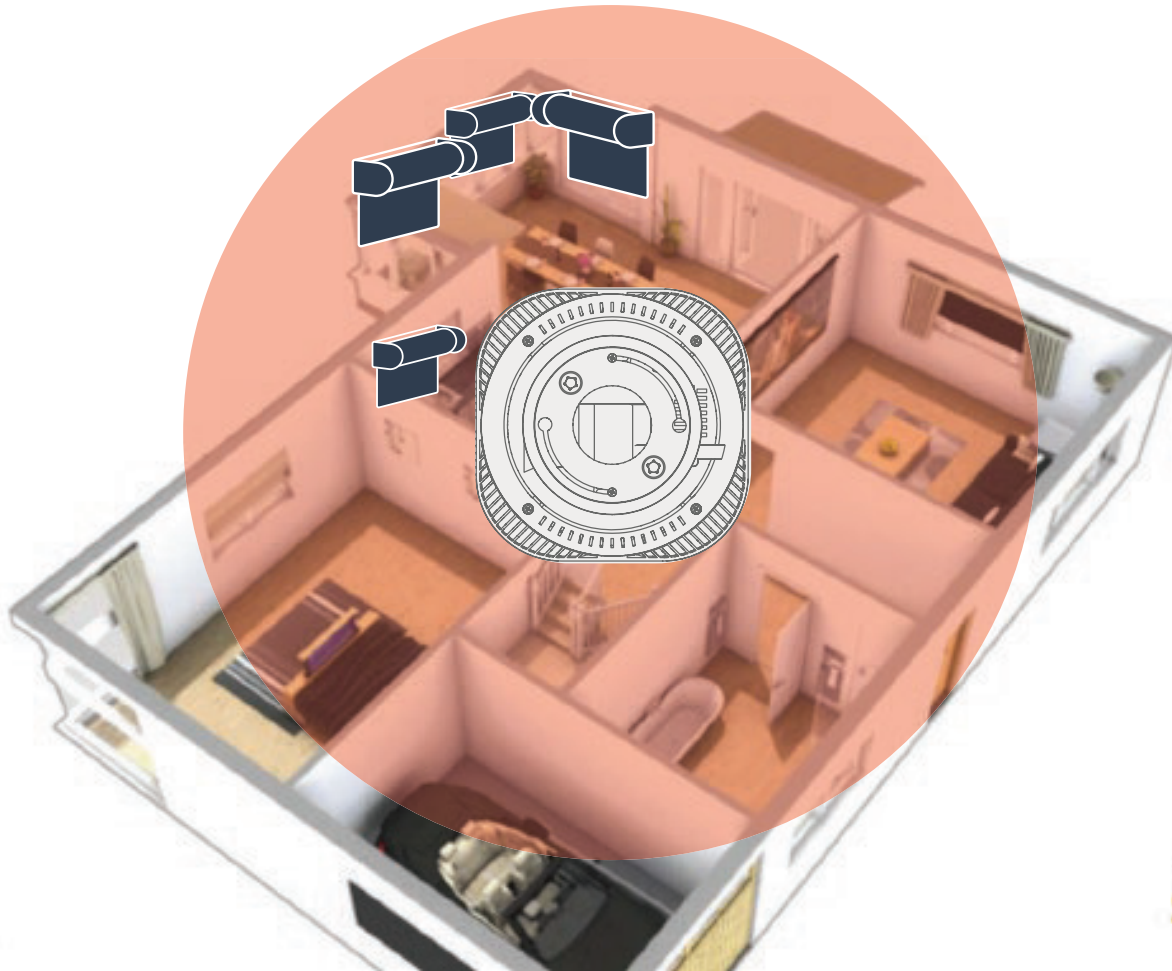
Multiply the construction with the square footage and then add the result together with the values for floors, and rooms to arrive at your RTS score.

This RTS score can provide a good baseline for you to your estimate how many RTS gateways will be needed for your project.

| RTS Score Chart | LinkPro Z(S) | Mylink(S) |
|-----------------|--------------|-----------|
| 1 - 3           | 1            | 2         |
| 4               | 2            | 3         |
| 5               | 3            | 4         |
| 6 - 7           | 3            | 6         |
| 8               | 4            | 7         |
| 9 - 10          | 4            | 9         |
| 11 - 13*        | 5            | 10        |

Round up to the next whole number

\*If your RTS score is 14 or more please contact SI support for free design assistance 512-832-6939.



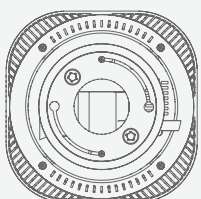
### RTS EXAMPLE #1:

Less Than 1.5K SF, 1 floor, 1 Room, 4 total shades, and Wood Construction = RTS score of 1.5 Points. This project will require one LinkPro Z or two myLinks

| Value  | #    | RTS |
|--------|------|-----|
| Const. | Wood | 5X  |
| Sq. ft | 1450 | 1+  |
| Floors | 1    | 1+  |
| Rooms  | 1    | 0   |

**RTS Score = 3**

$$\begin{array}{ccccccc}
 \begin{array}{|c|} \hline .5 \\ \hline \end{array} & \times & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 0 \\ \hline \end{array} & = & \begin{array}{|c|} \hline 1.5 \\ \hline \end{array} \\
 \text{Construction} & & \text{Sq Ft} & & \text{Floors} & & \text{Rooms} & & \text{RTS Score}
 \end{array}$$

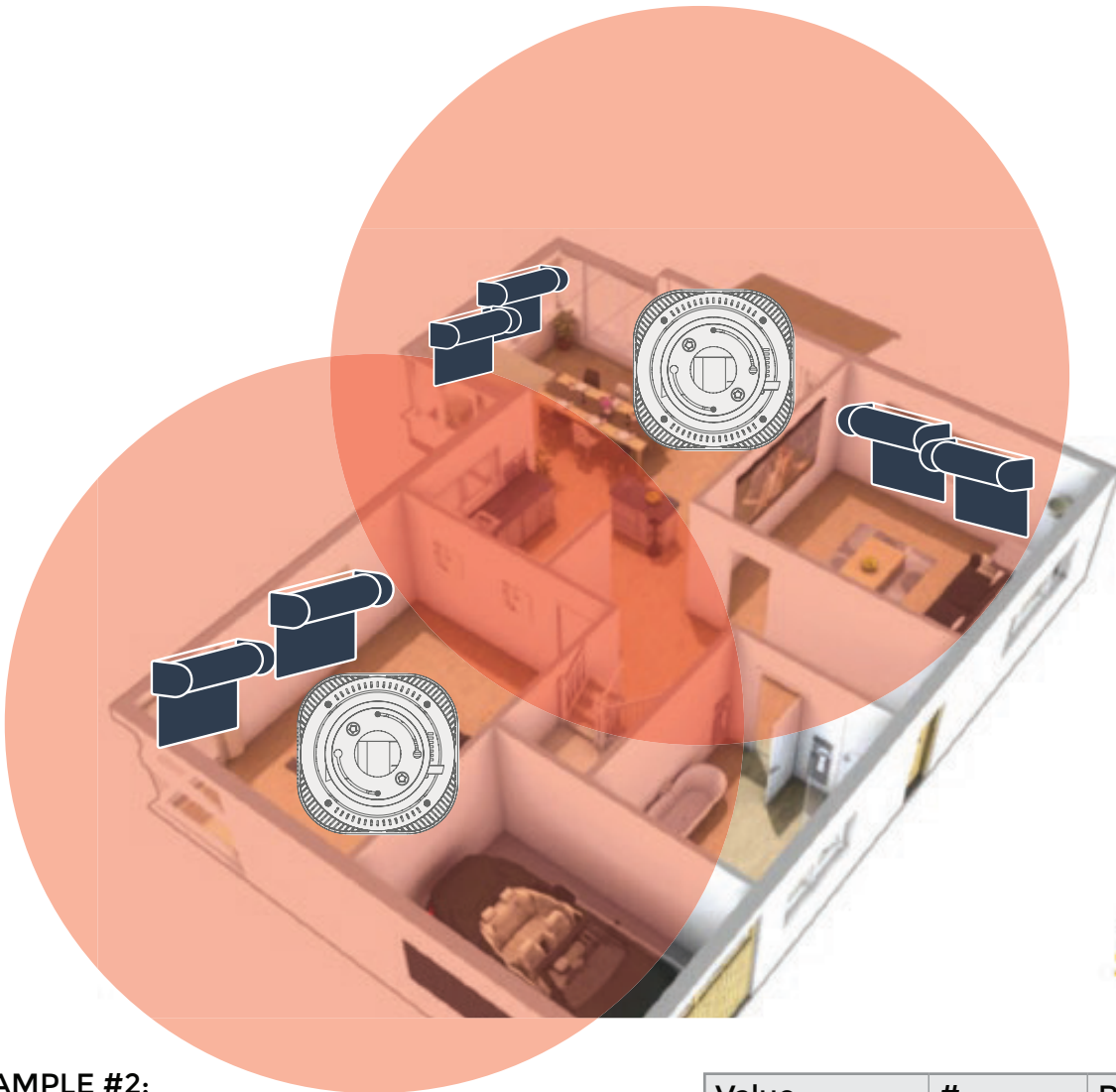


**x 1**

**or**



**x 2**



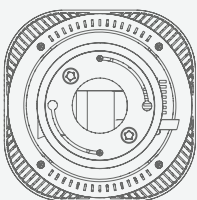
## RTS EXAMPLE #2:

Less Than 1.5K SF, 1Floor, 3 rooms of shades, 6 total shades, and Steel Construction = RTS score of 3.5 Points. This project will require two LinkPro Zs or three myLinks

| Value  | #     | RTS  |
|--------|-------|------|
| Const. | Steel | 1.5X |
| Sq. ft | 1450  | 1+   |
| Floors | 1     | 1+   |
| Rooms  | 3     | 1+   |

**RTS Score = 3.5**

$$\begin{array}{ccccccc}
 \begin{array}{|c|} \hline 1.5 \\ \hline \end{array} & \times & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & = & \begin{array}{|c|} \hline 1.5 \\ \hline \end{array} \\
 \text{Construction} & & \text{Sq Ft} & & \text{Floors} & & \text{Rooms} & & \text{RTS Score}
 \end{array}$$

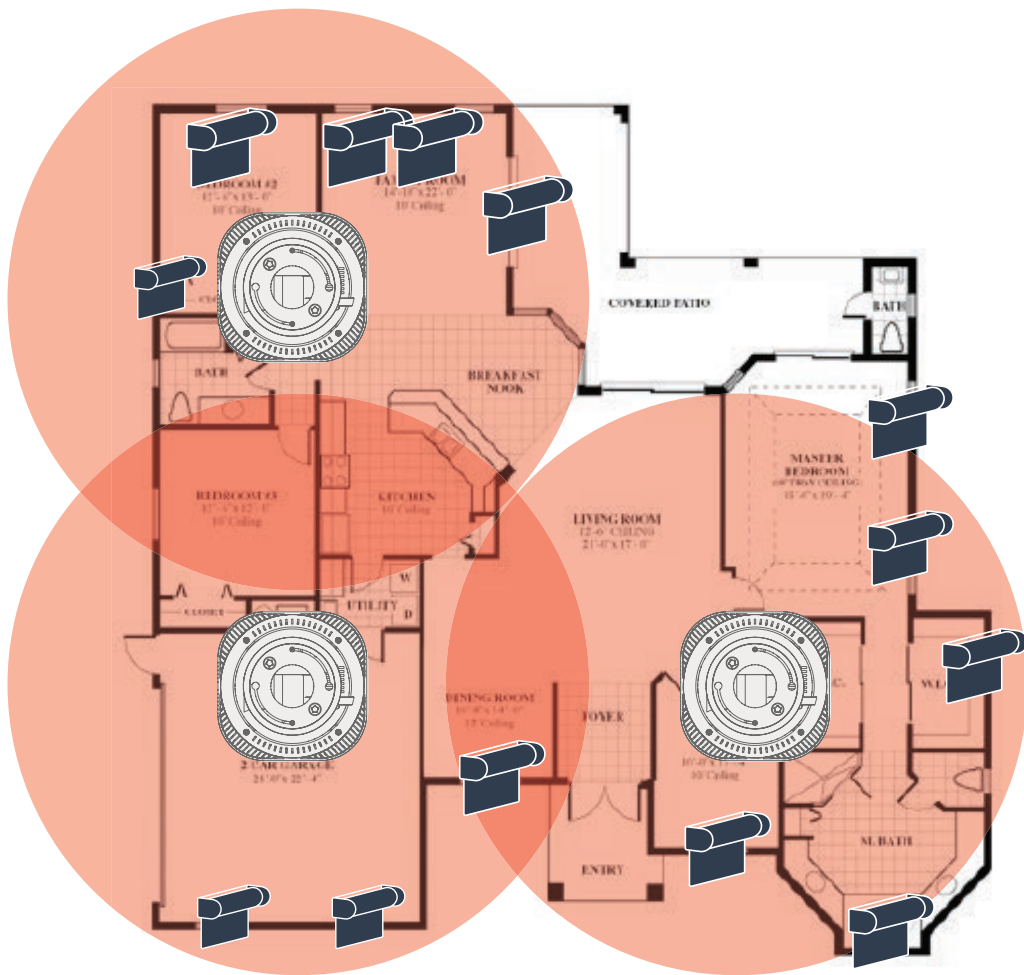


**x 2**

or



**x 3**



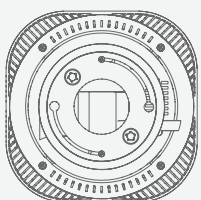
### RTS EXAMPLE #3:

2900 SF, and 1 Floor, and 13 shades, and Wood Construction results in an RTS score of 6 Points. This project will require three LinkPro Z's or six myLink's

| Value  | #    | RTS |
|--------|------|-----|
| Const. | Wood | .5X |
| Sq. ft | 2900 | 2+  |
| Floors | 1    | 1+  |
| Rooms  | 9    | 4+  |

**RTS Score = 6**

$$\begin{array}{ccccccc}
 \begin{array}{|c|} \hline .5 \\ \hline \end{array} & \times & \begin{array}{|c|} \hline 2 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 1 \\ \hline \end{array} & + & \begin{array}{|c|} \hline 4 \\ \hline \end{array} & = & \begin{array}{|c|} \hline 6 \\ \hline \end{array} \\
 \text{Construction} & & \text{Sq Ft} & & \text{Floors} & & \text{Rooms} & & \text{RTS Score}
 \end{array}$$

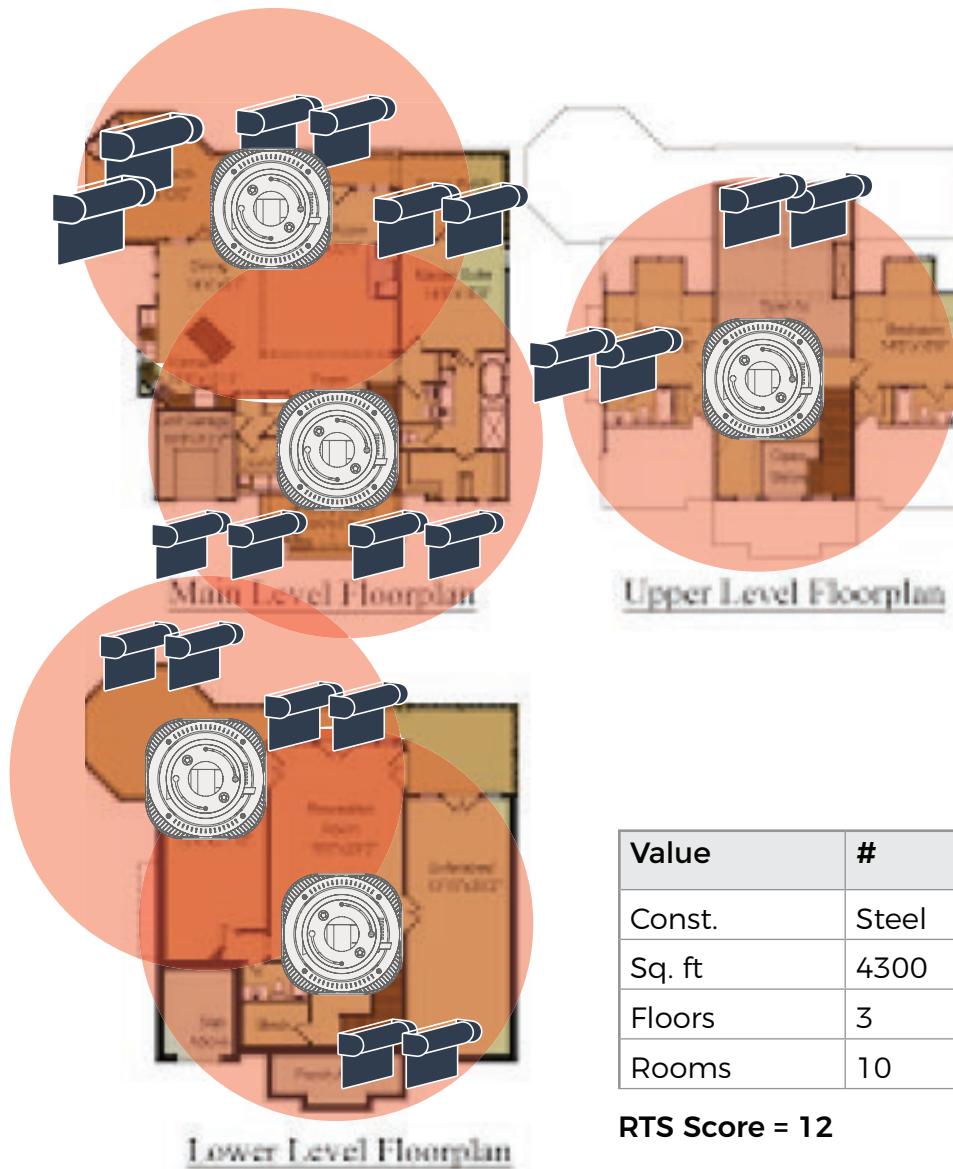


**x 1**

**or**

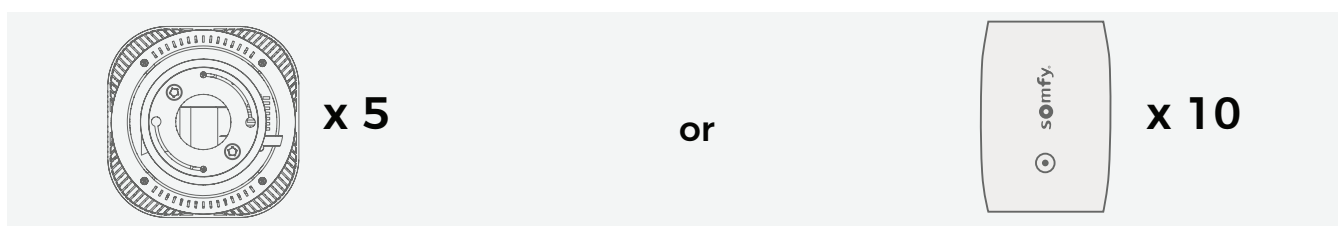
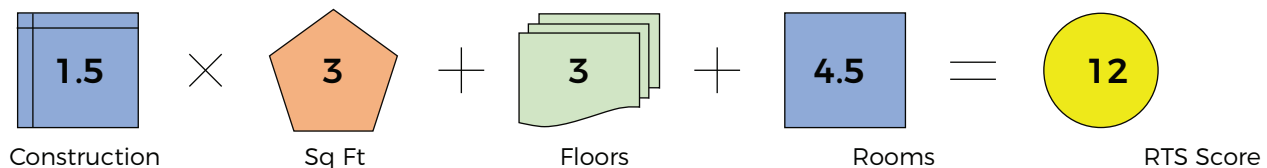


**x 2**



#### RTS EXAMPLE #4:

300 SF, 3 Floors, 10 rooms, 20 shades, and Steel Construction results in an RTS score of 12 Points. This project will require five LinkPro Z's or ten myLink's



## When would I need an RTS repeater?

An RTS repeater can be used in specific scenarios to help the RF coverage in a home. Do not use an RTS repeater in a system that uses a voice assistant such as Alexa, or a system that does not have a 3rd party control system (standalone system), and that requires the use of the myLink app for creating scheduling or scenes.

If you are using a 3rd party control system to do any scheduling, or to manage any scenes, or you only have a single LinkPro Z, then it is possible to deploy one RTS repeater if necessary, in your project. **Do not use more than one RTS repeater in any system.**

| When can I use a RTS Repeater?                                                                                               | Yes | No |
|------------------------------------------------------------------------------------------------------------------------------|-----|----|
| 1 LinkPro Z, with or without Alexa                                                                                           | ✓   |    |
| 2 or more LinkPro Z's, with or without Alexa and using myLink app for scenes                                                 |     | ✗  |
| 2 or more LinkPro Z's, using a 3rd party control system to create scenes and scheduling                                      | ✓   |    |
| 1 LinkPro Z with or without a 3rd party control system                                                                       | ✓   |    |
| 2 or more LinkPro Z's, using the myLink app to create scenes or schedules                                                    |     | ✗  |
| 1 LinkPro Z with a 3rd party control system, AND using myLink app to create and schedule scenes                              |     | ✗  |
| Using 2 or more RTS repeaters                                                                                                |     | ✗  |
| Using no LinkPro Z's and 2 or more Decoflex or Smooove keypads, and no scenes or groups programmed into any Decoflex buttons | ✓   |    |
| Works with control systems when not using the MyLink app.                                                                    | ✓   |    |



Somfy RTS Repeater 1810791

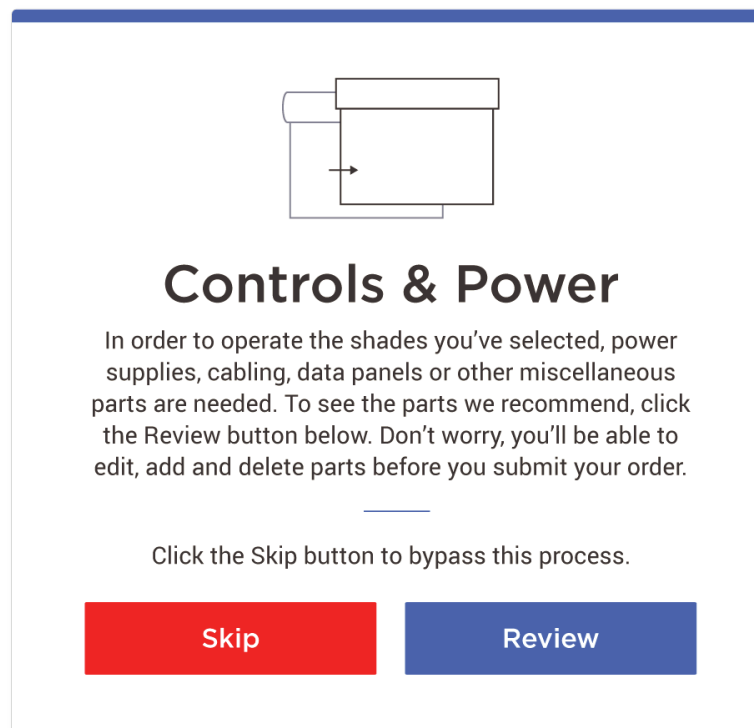
An RTS repeater should never be used to extend the range of an RTS gateway to another room. If you have shades in another room, it would always be a best practice to place another RTS gateway in that room.

A great use of an RTS repeater is for a shade or shades which due to the location of, or construction directly around them prevent the normal use of an RTS gateway within that room. Place them as high as possible.



## Will flow help me to design an RTS shade system?

In a future update of our flow tool you will be prompted to enter in the project data as we had in the RTS formula to achieve an RTS score and device recommendations such as the square footage, floors, shade rooms, and construction types.



With this data, the FLOW tool will make a recommendation of RTS gateways to cover the project. When you go to install the project Shade Innovations will guarantee the performance of the coverage of the system.

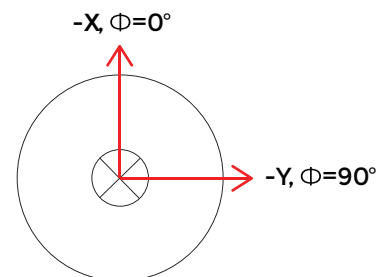
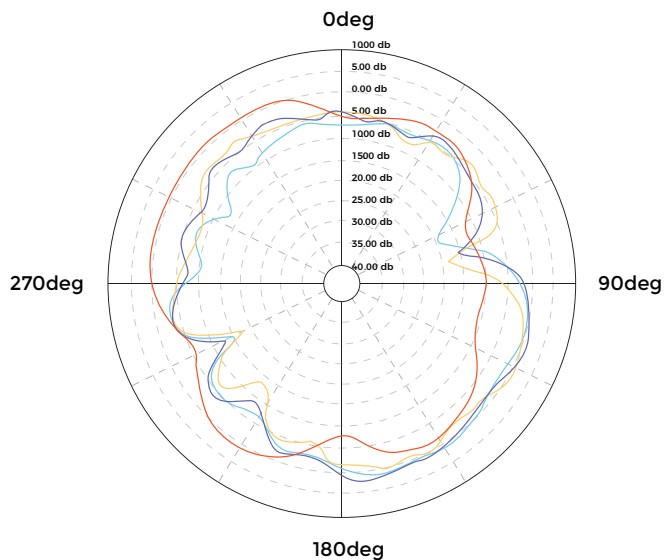
**If the RTS system doesn't perform or provide full coverage of the system, we will make it right at no additional cost to you.**

## How does the myLink app communicate with RTS gateways?

LinkPro Z and other RTS gateways communicate with the myLink app on your phone or tablet using your client's WIFI network. It is important to have a good WIFI signal on each RTS gateway of at least -65dBm.



### WIFI Radiation pattern XY-plane



**Theta =  $-90^\circ$**

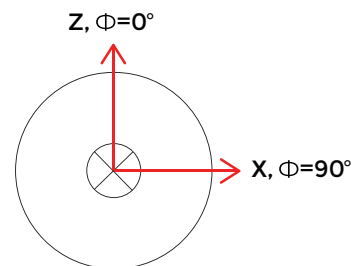
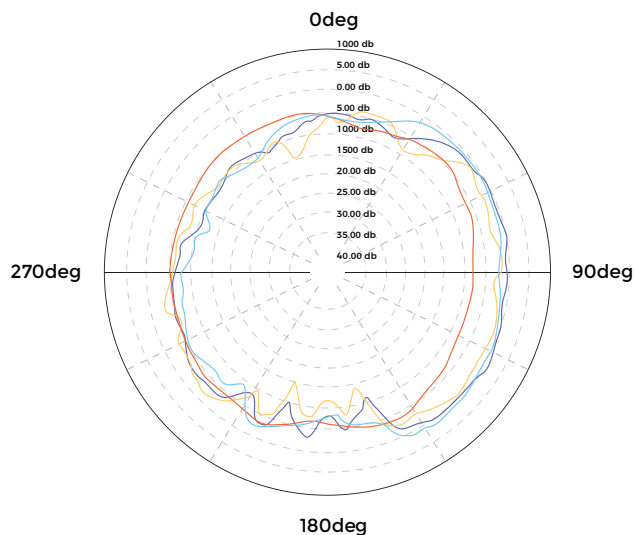
**RED = 2.4 GHz**

**VIOLET = 5GHz CH 1-4**

**BLUE = 5GHz CH 5-8**

**YELLOW = 5GHz CH 9-12**

### WIFI Radiation pattern XZ-plane



**Phi =  $0^\circ$**

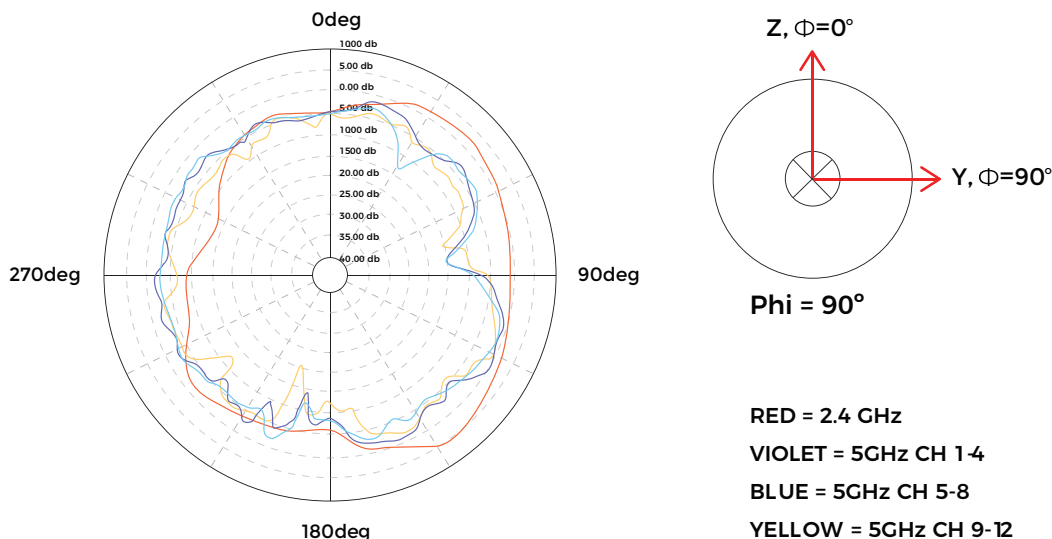
**RED = 2.4 GHz**

**VIOLET = 5GHz CH 1-4**

**BLUE = 5GHz CH 5-8**

**YELLOW = 5GHz CH 9-12**

## WIFI Radiation pattern YZ-plane



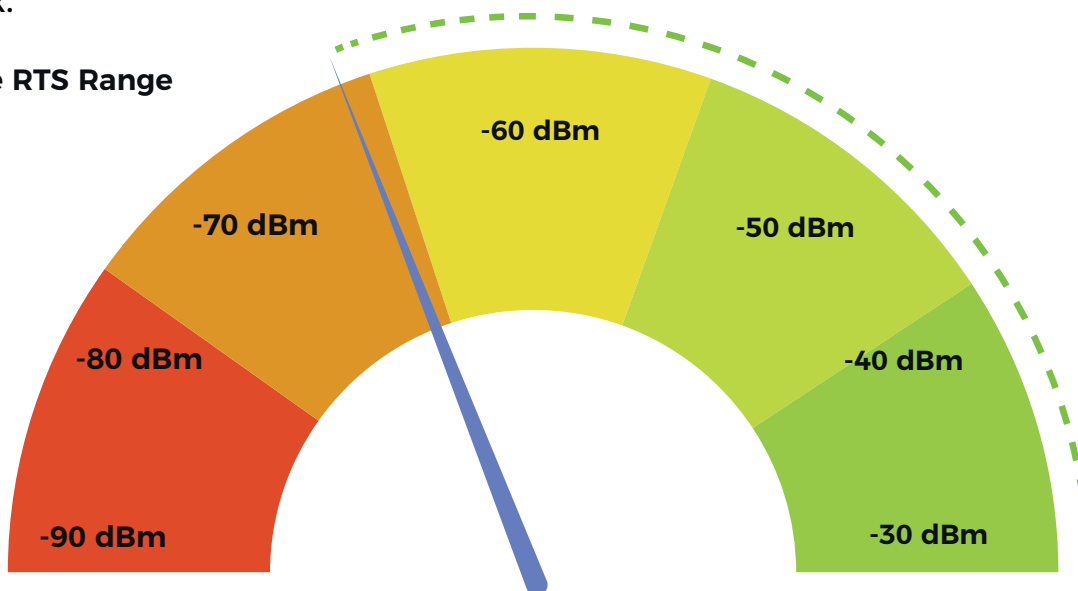
## How do I measure the WIFI signal?

WIFI signal strengths are measured in decibel milliwatts or dBm and are expressed as a negative integer and the lower the value the better the signal strength. You can use a WIFI scanner app on your phone or PC and you will look for the Received Signal Strength Indicator or RSSI value.

If you are on a MAC with OS X just press and hold the Alt key while clicking on the WIFI icon in the status menu.

In order to have a reliable and robust RTS shade system each RTS gateway will need a signal strength of at least -65dBm. If an RTS gateway signal strength remains at a weaker signal than this, the device may fall off the network, or in some networks may be pruned from the network.

### Reliable RTS Range



## What software tools do I need to measure a WIFI network?

At the end of this RTS Guide we have listed several Free and paid for applications including the download links, screen shots and more.

What steps can I take to ensure a robust and reliable WIFI?

- Perform a site survey and recommend adding WIFI coverage in areas that cannot maintain over a -65dBm signal strength, and or move the WAP or RTS gateway to achieve this signal strength.
- RTS gateways should be in locations free of obstructions like furniture, glass, and other RF interfering materials. Use the ceiling if possible.
- For best performance WiFi channels should be located on channel 1, 6, or 11 when using 2.4GHz. Keep the RTS gateways on one of the frequency ranges 2.4 or 5, but not both.
- Ensure the myLink app shows a signal strength of “Good: or Excellent”, if your app does not, then consider moving the WAP or RTS gateway until it does. For the best performance the signal strength at the RTS gateway should be 20dB higher than the noise floor, but in all cases the signal should be -65dBm or higher.
- For best performance set your WAP broadcast strength manually
- Place the RTS gateway as close as possible to a single WAP, and that a strong signal is present at that location of at least -65dBm. This also must still be within the 30 ft range of the shades that you would like to control, if not change position of the RTS gateway until you are within the 30’ range of the shades and can maintain a signal stronger than -65dBm
- Please ensure all WAP are located on the same WIFI channel for all access points
- DO NOT place any RTS gateway in-between one or more WAP with the same SSID and same signal strength. Move the RTS gateway or one of the WAP to solve this issue.

At the end of this RTS Guide we have listed several free & paid versions of WIFI scanning software including the download links, screen shots & more.

## What WIFI networks are fully qualified for use with RTS gateways?



## What WIFI networks are not currently fully qualified for use with our RTS gateways?



For help with any of the brands, models or firmware you see here or other brands that have not yet been fully qualified, please contact SI technical support for further assistance.

### FOOTNOTES FROM ABOVE

\*We are working directly with Access Networks to fully qualify the equipment.

\*\*\*We are working directly with Pakedge to solve a WAN issue. Most deployments are LAN based.

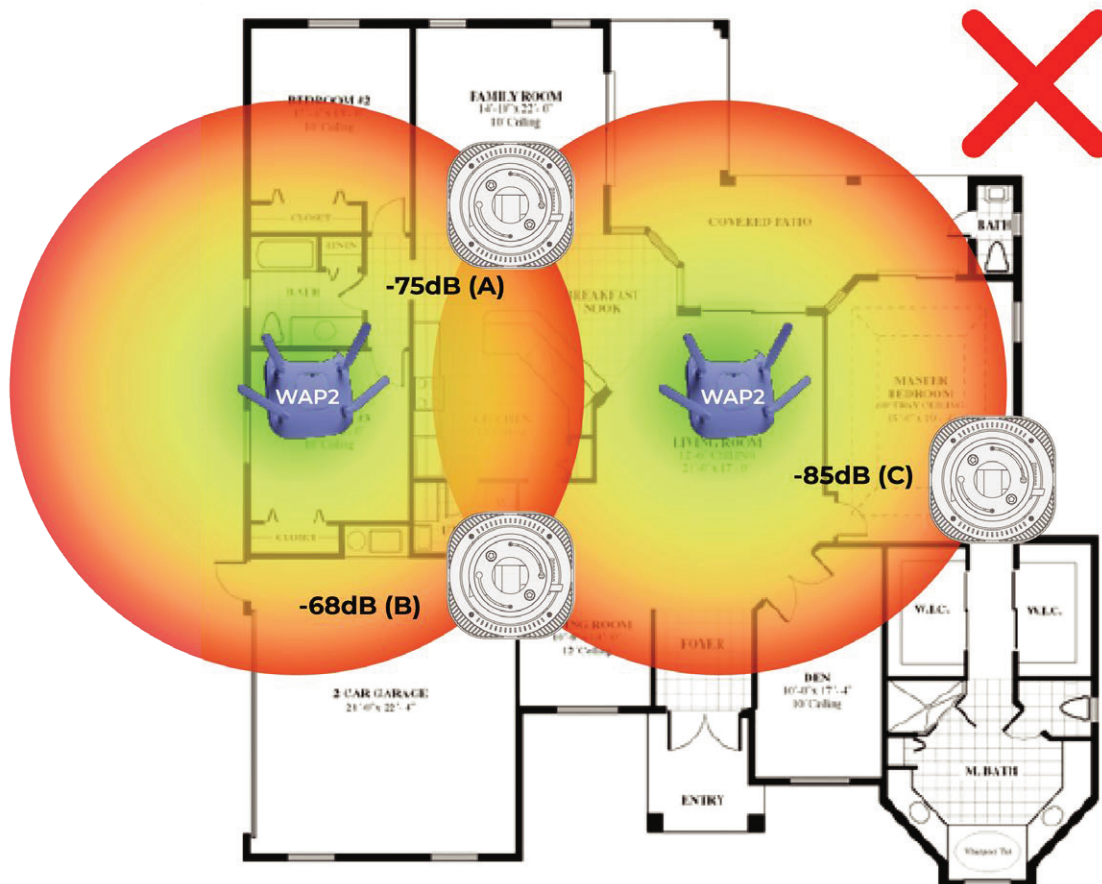
## How should I design the RTS and WIFI networks?

Make sure that all RTS gateways are located close to one of the WIFI access points, and not in the middle of two access points. We would like the RTS gateway to have greater than -65dBm signal (Yellow in graph) to the access point. (lower number is stronger signal)

Keep in mind all RTS gateways must be located within 30 feet from the shades they are controlling.

We describe how to generate a WIFI heatmap later in this guide and a link to a trial version of software that you can use.

### Example of bad WIFI coverage



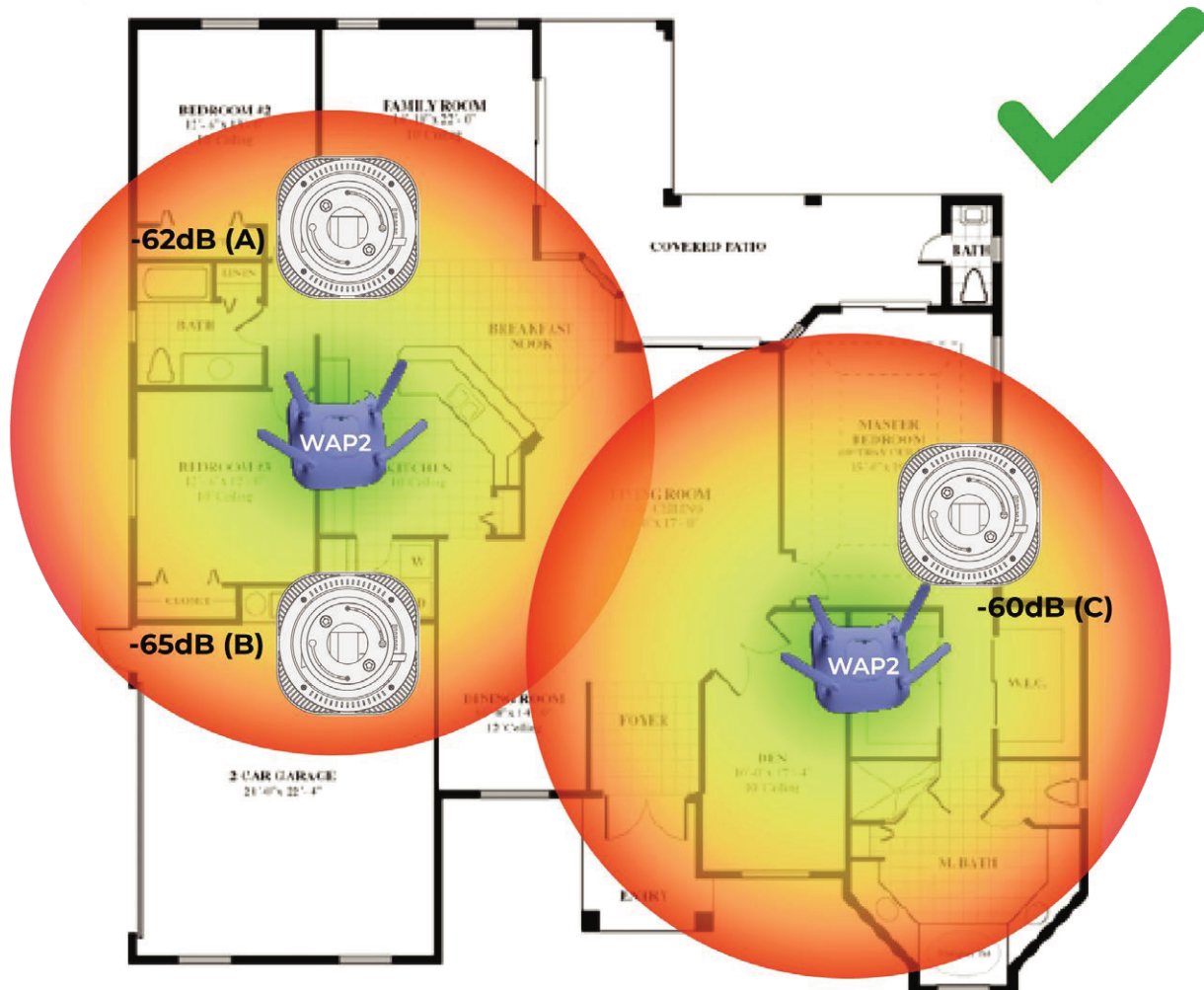
## What is wrong with this design?

Two main issues with this WIFI deployment;

First all three RTS gateways are beyond the -65dBm signal level that you will want to have.

REMEDY – Move RTS gateways closer to one of the WAP and maintain -65dBm or better signal strength.

Second, the RTS gateways are equally split between two WAP which cause the RTS gateways to switch back and forth between the strongest signal. REMEDY – Move one of the WAP's or RTS gateways so that they are at different distances from WAPs.



We simply moved the WAP points to solve both issues.

## Can I mount LinkPro Z Upside down?

Yes, however LinkPro Z was designed to be ceiling mounted, so mounting it upside down may result in a lower RF performance, keep orientation the same.



## What can I do if myLink show poor signal in the myLink app?



First try to move myLink closer to a wireless access point;

next try moving the myLink higher (if possible).



Check location for a high 2.4 Ghz noise floor with RF scanner software like Channelizer from MetaGeek.



You can also switch to 5GHz if your scan shows high levels of signal at

If you are still having issues, then call SI support at 1-512-832-6939'

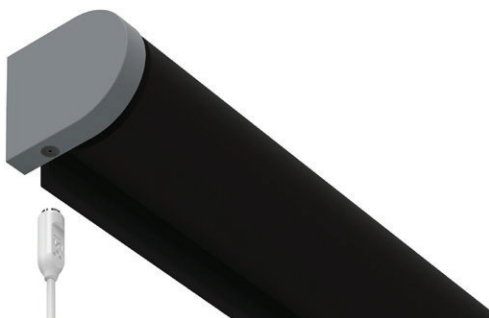
## What commands are available for use with 3rd party control?

The RTS technology API allows you to control one or more shades and or groups. You can send commands to send the shades up, down, stop and preset selections (my) you can also create and send scenes.



## How long does the battery last in an RTS shade?

The Shade Innovations RTS shades are designed to maximize energy and customers should expect to need a recharge about every 12-18 months. This estimate is based on a normal everyday use of opening and closing each day.



## How often does the batteries need to be replaced?

The Shade Innovations RTS shades will not need the batteries replaced and charging them could not be any simpler with our patented break-away magnetic connector.

## How long does it take to recharge the batteries?

4 to 6 hours to a full recharge



## Do I need a ladder to recharge shades installed on a second level?

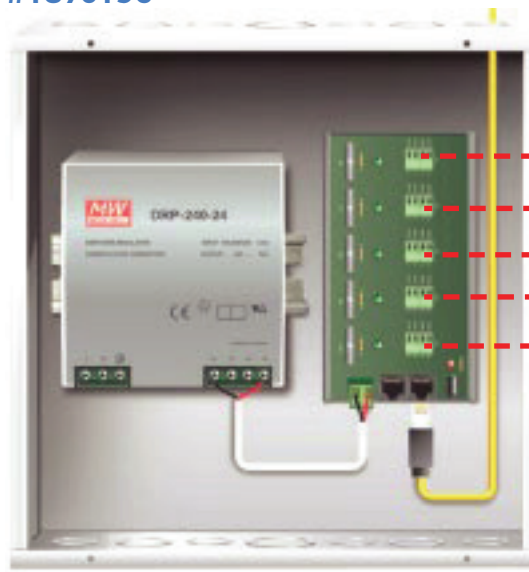
We provide a tip that will thread onto most any “painters poles” which are commonly found at local stores and since our shade charging connection is just get it close and it will pull the charging cable to the spot for you.



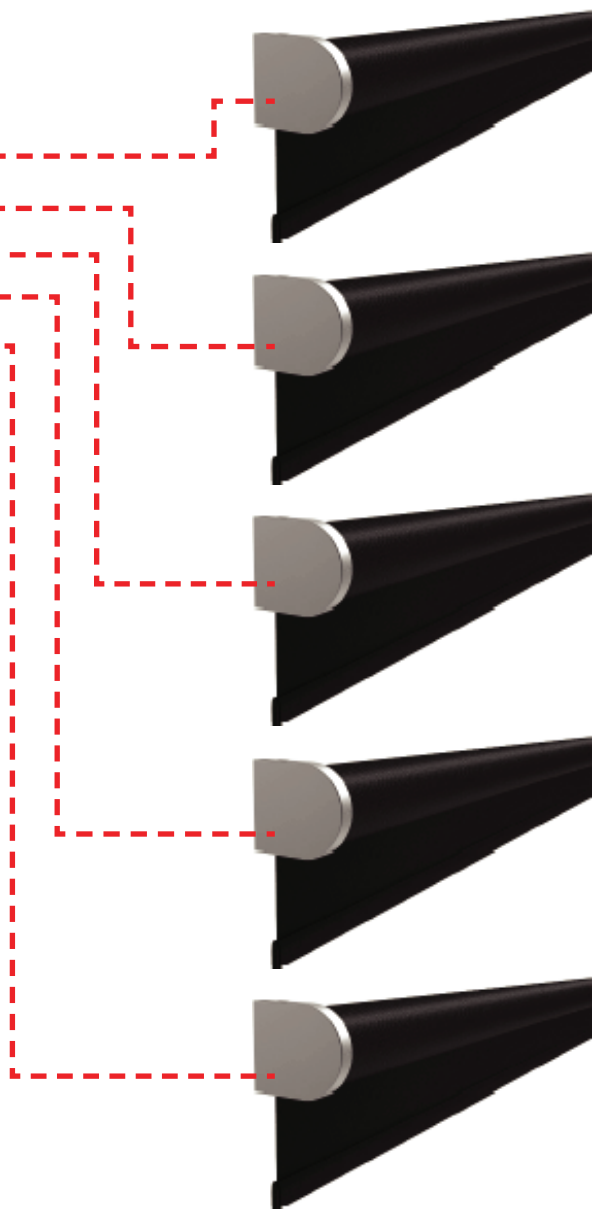
# Can I design an RTS shade system without any batteries?

YES, all Shade Innovations RTS shades can also be designed for AC or DC power using local power supplies, remote power distribution or even simple AC power outlets located near the shade(s). For remote power distribution you will pull a 2 conductor wire to the location of your DC power distribution box.

#1870196



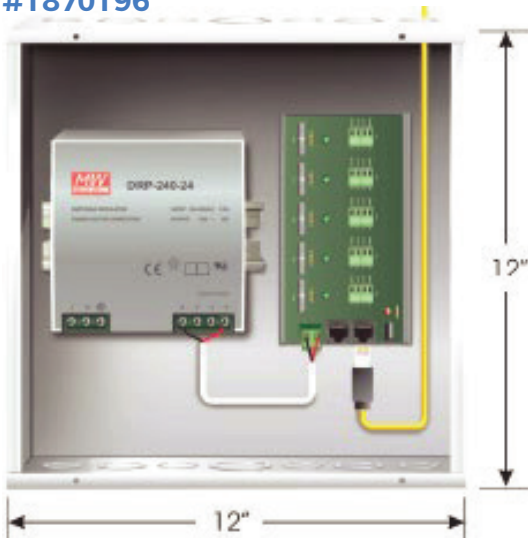
| AWG                                 | Length |
|-------------------------------------|--------|
| UTP min AWG23 using all 4 pairs 4x4 | 100'   |
| 18 AWG x 2                          | 100'   |
| 16 AWG x 2                          | 150'   |
| 14 AWG x 2                          | 200'   |
| 12 AWG x 2                          | 250'   |



## What sizes do the DC power distribution boxes come in?

The distribution panels come in 5, 10, 15, and 20 shade models and listed below;

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#1870192



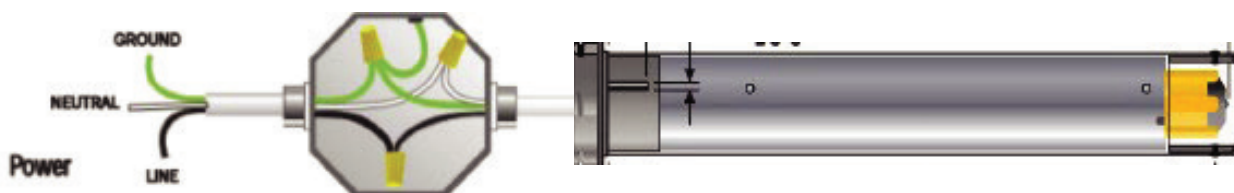
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**AC power options also allow for ultra-quiet and ultra-strength for larger shades!**



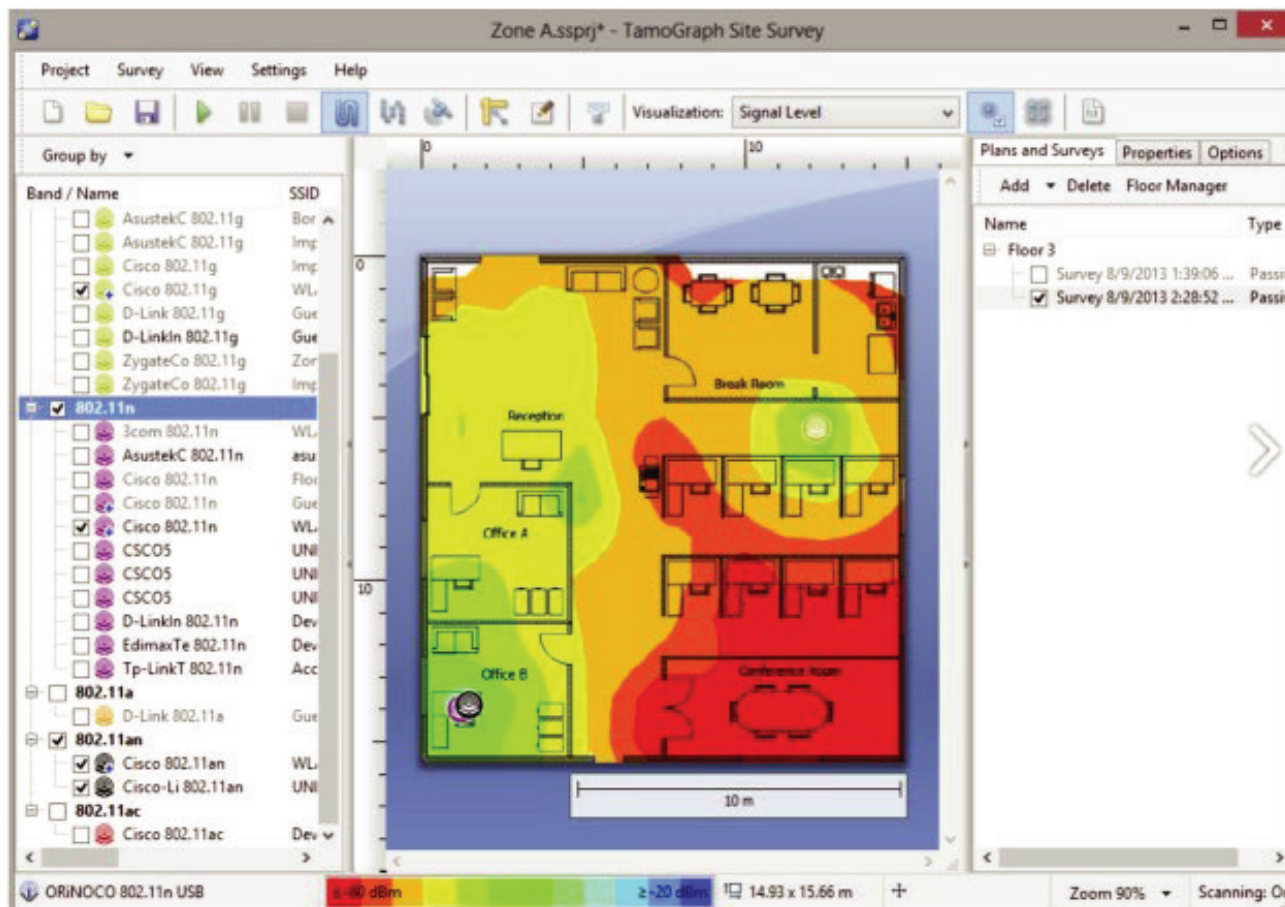
## What RTS control options do I have?

Shade Innovations offers many different control options, such as several types of hand-held and tabletop RF wireless remote controls, as well as wall mounted wireless keypads. These options should be considered even if you have a 3rd party control system. A best practice should be that all sub systems should be able to stand alone regardless of the control system status.



## My SI RTS proposal was accepted by my client, what best practice should I do BEFORE the shade installation day?

Before you deploy a shade project, we highly recommend conducting a RF site survey. Several companies make software and tools that can help you with this. One such tool is called TamoGraph Site Survey from Tamosoft.



Using this tool, you will be able to generate a report and visual graphics that can identify problematic locations where the client would like you to install shades. Using tools such as this BEFORE your deployment day can identify many problems, such as weak WIFI, or gaps in your WIFI coverage, or even which WIFI channels to use to avoid high noise floor areas of the job site.

This can allow you to make WIFI recommendations and upgrades and ensure a robust and reliable WireFree environment. The software is easy to conduct, just by walking through your client's site with the software running on your PC you can generate this report in less than 30 minutes.

Visit <https://www.tamos.com/products/wifi-site-survey/> to learn more.

## What other software would be helpful to deploy a reliable WIFI system?



We have also used a product called the Wi-Spy DBx, and a software called Chanalyzer by Metageek.

This software can help you to identify and document the WIFI environment and all the 2.4GHz traffic and radiators.

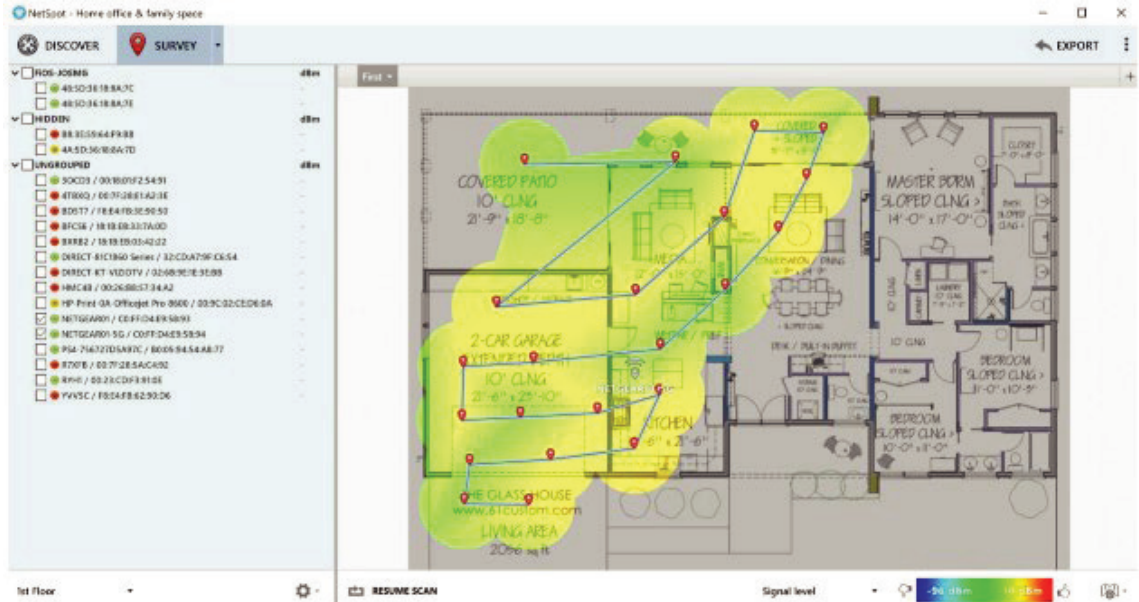
<https://www.metageek.com/products/wi-spy/>

## What free tools can I use to help conduct a site survey?

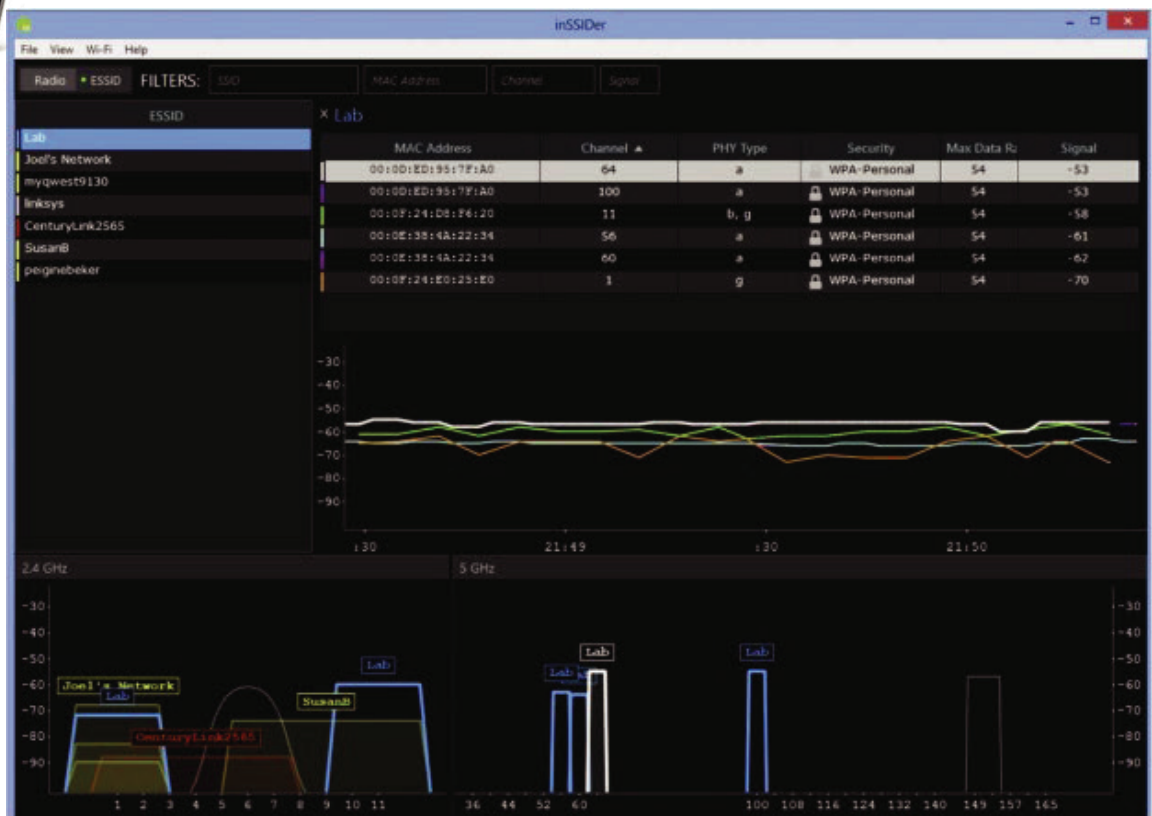
Install the NETGEAR WiFi Analytics for Android phones for no-cost quick survey. Find this app in the Google Play store.



NetSpot – Free and paid versions <https://www.netspotapp.com>

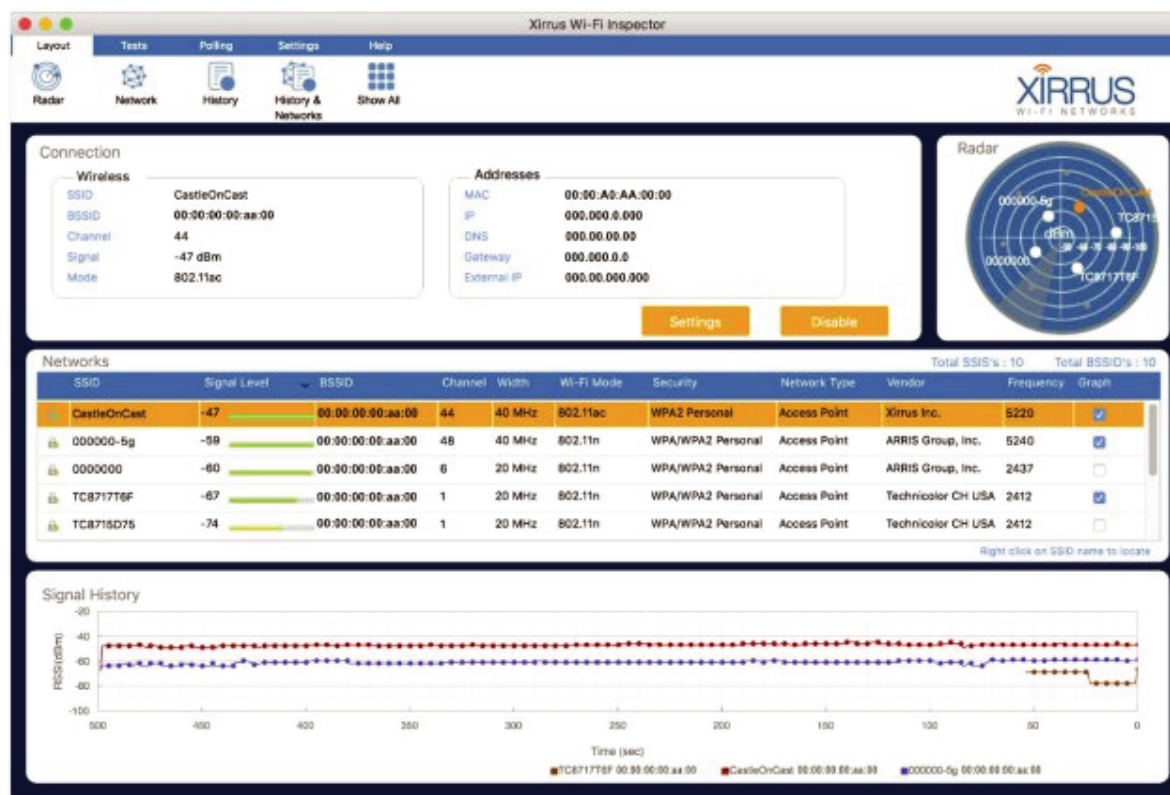


inSSIDer – Free and paid <https://www.metageek.com/products/inssider/>



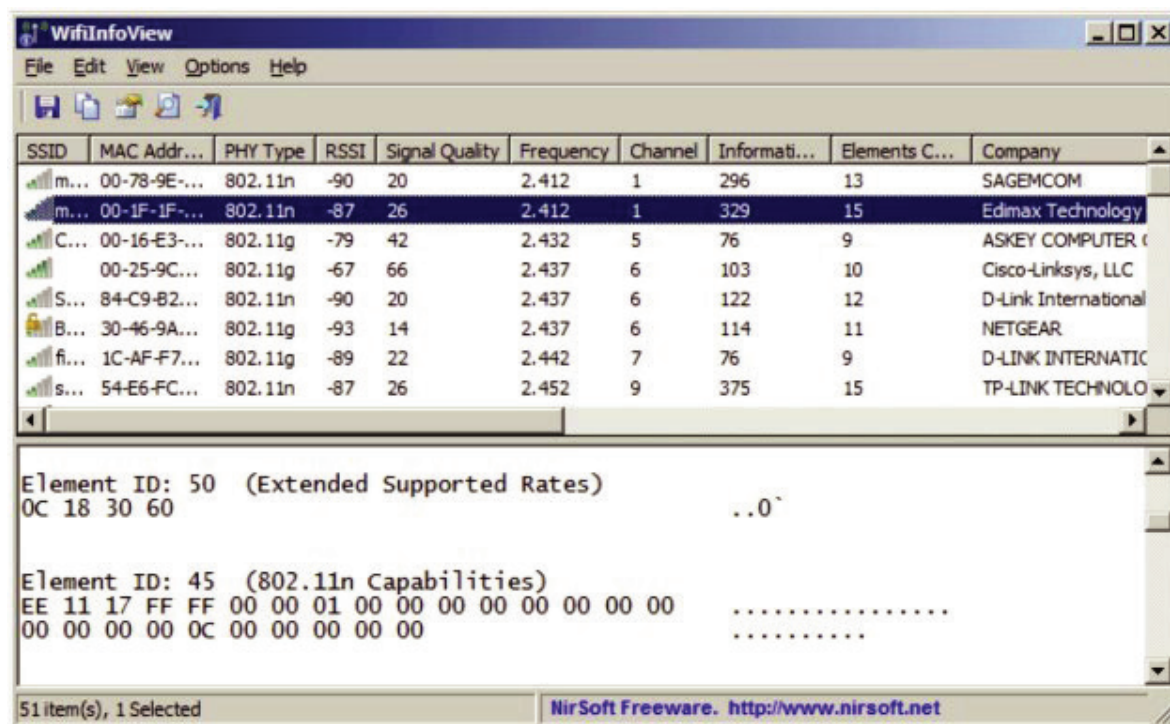
## Xirrus Wi-Fi Inspector- Free and paid versions

<https://www.riverbed.com/products/xirrus/inspector.html>

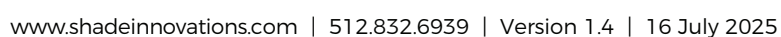


## WifiInfoView- Free versions

[http://www.nirsoft.net/utills/wifi\\_information\\_view.html](http://www.nirsoft.net/utills/wifi_information_view.html)



<http://wifiscanner.com/wifiscanner-windows.html>



## **What ports do I need to open on the client's router to ensure reliable LAN and WAN communication of the RTS system?**

The SI RTS system uses the Somfy cloud for deployment and for use with the myLink cloud based app. The following ports should be open on your client's router to ensure the system works properly with the Somfy cloud:

55050

44040

8883

20000

44100

44200

1902

When the client is using an ISP provided router, or if you are installing a 3rd party router these ports must be opened for proper RTS operation.

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