



# Installation Guide Smart Link Series——

15K Smart Link













Signal Booster

Outdoor Antenna

50ft Outdoor Cable

Indoor Antenna

50ft Indoor Cable



Power Supply

Accessories for main parts are all provided



waterproof tape to protect connections

Bluetooth and Wi-Fi antenna

# **Booster Light Patterns**

	LED STATUS INDICATORS				
LED	STATUS	INDICATION			
	Solid Green	Normal			
	Slow Flashing Green	Slight Overload			
ALARM	Quick Flashing Green	Overload			
	Quick Flashing Red	Booster automatically shut off due to strong overload			
Power	Green	Normal			
TOWER	Off	DC Power Problem			
	Solid Green	Normal			
	Slow Flashing Green	Slight Loopback			
ISO	Quick Flashing Green	Loopback			
	Quick Flashing Red	Booster automatically shut off due to strong loopback			

Note: If the booster automatically shut off , please manually reboot it.

LED STATUS INDICATORS				
LED	STATUS	INDICATION		
Bluetooth	Slow Flashing Green	Bluetooth Disconnected		
	Quick Flashing Green	Bluetooth Connected		
	Solid Green	Wi-Fi Disconnected		
Wi-Fi	Slow Flashing Green	Wi-Fi Connected		

# Bands contained in the Gauges on Signal Supervisor

Gauge	Band	Uplink	Downlink
LTE700	12/17	698-716MHz	728-746MHz
	13	776-787MHz	746-757MHz
CELL800	5	824-849MHz	869-894MHz
PCS1900	25/2	1850-1915MHz	1930-1995MHz
AWS2100	4	1710-1755MHz	2110-2155MHz

Please focus on the gauge that contains the band you are using.

# 🕸 Getting Started



Step 1 Connect the Power Supply and the whip antenna to the Booster



Step 2 Download the Signal Supervisor App, register ID and booster.

Register an ID first and log in. Add the booster to the device list.

#### Step 3 Find the cell tower & Determine the outdoor antenna's position

3.1 Find the band you are using

#### For Android

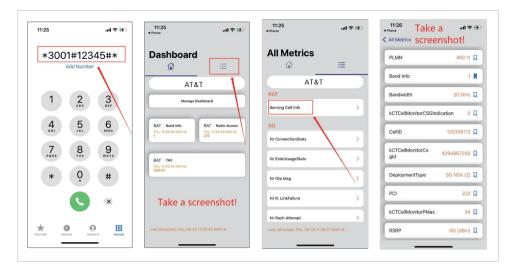
Download NetWork Cell Info Lite in the Google store and open it. It can be seen from the example picture that the frequency band is band 13. (According to the form before, you need to pay attention to Gauge LTE700)

Then click MAP. You can see your phone connecting to a tower, and you can try aiming your outdoor antenna at it. But sometimes this is not accurate. You could also move to Step 3.2 to find the tower

Note: Please take screenshots at this stage.



#### For ios



(1) Dial \*3001#12345#\*

(2) Follow the instructions, take the screenshots as required.

#### 3.2 Find the cell tower

- (1) Enter cellmapper.net
- (2) Choose your own carrier and band here.

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- Hide Menu	- Hide Menu
SC 346	Select Provider
('A') Provider	Provider (3)
Statistics	Select a Provider
Behune 154569	Network
<b>Filters</b>	4G-LTE 👻
E Legend	Band
Q Search	Band Selection
Settings	¢ Settings

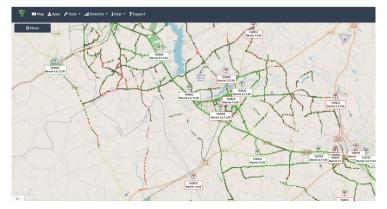
(3) Then enter the coordinate of where you are trying to install the signal booster, and press Enter key.

(In fact when you open Cellmapper, the map on the right will automatically locate your area if you've given the site permission to access your location. If you found tower sites not even displayed on the map, it might because the app intercepts the locations for security reasons.)

🛜 🕅 Map 🛓 Apps 🖌 Tools 🗸 ,	🛜 🛍 Map 🛓 Apps 🥕 Tools 🗸 📶 Statistics 👻 i Help 👻 ? Support	
- Hide Menu	-Hide Menu	5/
sc 346	Search X	1
US1	Enter street or city name	
Statistics	Move to current location	5
TFilters	Tower Search	
■ Legend	ex. 12345, 00ABA, 0x1234 (name search is NOT supported) BSIC/PCI/PSC Search	
Sc 341	ex. 10, 123	K
Q Search	Settings	1
Settings		H- T

(4) After the map jumps to the location, you can scroll the mouse pulley and zoom it out, then you will see the tower near the location. It would be better to take a screenshot of this page to guide the following installing steps. Should you have any questions, please contact our tech support.

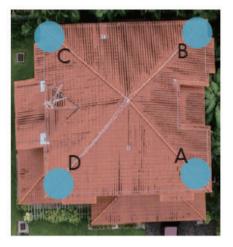
Note: If you need help finding the tower, please contact our tech support and provide your carrier, band and screenshots taken in the last steps.



#### 3.3 Determine the outdoor antenna' s position

The outdoor antenna is usually placed at one of the 4 ends of the roof.

Please choose the position according to the tower's location. Make sure there are no barriers between the antenna and the tower.



Step 4 Connect the outdoor antenna with the booster



Note: At this stage, don't connect the indoor antenna to the booster.

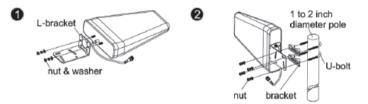
#### Step 5 Adjust and fix the Outdoor Antenna



Have your outdoor antenna pointed to the cell tower you found before and observe the reading on the app. Adjust the outdoor antenna accordingly.

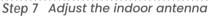
Notes:

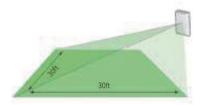
The output power should be the higher the better.
 The full output power for 15k Smartlink is 12dBm.
 And the full gain is 72dB.



#### Step 6 Connect the indoor antenna with the booster











Have your indoor antenna pointed to the area you would like to cover with signal.

Notes:

(1)It would be best if you could make the two antennas face opposite directions.

(2)Make sure that the gain reaches about 65dB. If not, please adjust the direction of the indoor antenna/increase the vertical and horizontal distance between the two antennas/add some barriers.

#### Step 8 Signal quality test



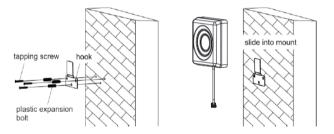
You could do the following:

(1)First make sure the signal gauge value is unchanged from that during the outdoor antenna installation.

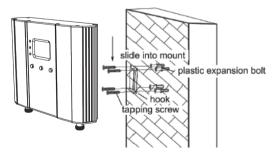
(2)Do speed tests with the booster on and off, and make a comparison.(3)Check if the number of signal bars increases.

(4)Make a phone call or send messages and check if the voice and streaming are better.

#### Step 9 Fix the Inside Antenna and the Booster



Fix the indoor antenna with the provided expansion bolt and hook.



Fix the booster with the provided expansion bolt and hook.

## 4 Regular Problems and 1 normal status

### If the booster is working normally, no further adjustment is required

	OVERLOAD					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	<60dB	>=10dBm				
CELL800	<60dB	>=10dBm	Alarm light quick blinking green or red	Outdoor signal is	Have your outdoor antenna pointed slightly away from the	
PCS1900	<65dB	>=10dBm	billiking green of red	too strong	cell tower	
AWS2100	<65dB	>=10dBm				

	LOOP BACK					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	<60dB	<10dBm			<ol> <li>Increase vertical and horizontal distance.</li> </ol>	
CELL800	<60dB	<10dBm	ISO light blinking green or red	Inadequate	<ol> <li>Make the indoor and outdoor antennas face</li> </ol>	
PCS1900	<65dB	<10dBm		separation of the		opposite directions. 3、Add barriers(e.g. walls)
AWS2100	<65dB	<10 dBm		antennas		

	POOR SIGNAL					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	>=60dB	/NEGATIVE	Alarm light and ISO light solid green		<ol> <li>Try adjusting the outdoor antenna to the best direction</li> <li>Try adjusting the outdoor antenna to another cell tower</li> <li>Try increasing the height of the outdoor antenna and make</li> </ol>	
CELL800	>=60dB	/NEGATIVE				
PCS1900	>=65dB	/NEGATIVE		Input signal is too weak	sure there are no barriers between the tower and the outdoor antenna	
AWS2100	>=65dB	/NEGATIVE			Please try these solutions until the output power reaches or is over -5dBm.	

	Normal but No Boosted Signal					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	>=60dB	>=-5dBm			Check the band you are using again. If it stays at band66,get	
CELL800	>=60dB	>=-5dBm	Alarm light and ISO light solid green	1、The band is not supported	into the 'Detail'/ 'Setting' of gagues on Signal Supervisor and switch off RF switch of AWS2100, then adjust the	
PCS1900	>=65dB	>=-5dBm		2、The Signal is from Other Carriers	outdoor antenna again. It would be better if there are two persons and one can stay near	
AWS2100	>=65dB	>=-5dBm			the indoor antenna to check if the signal is boosted.	

	NORMAL					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	>=60dB	>=-5dBm				
CELL800	>=60dB	>=-5dBm	Alarm light and ISO			
PCS1900	>=65dB	>=-5dBm	light solid green			
AWS2100	>=65 dB	>=-5dBm				

#### Note:

Some customers have some misunderstandings about boosters, and we would like to clarify it here:

If you can't even get a stable 1 bar outside the house or on the roof, then we suggest you return it as it won't work in areas with very weak signal, the same is true of all boosters on the market.

## **Technical Specifications**

Model No.	4K Smart Link	10K Smart Link	15K Smart Link	
Working Bands	Band 12/17/Band 13/Band 5/Band 25/2/Band 4			
UL Frequency Range	698-716 / 776-787 / 82	4-849 / 1850-1915 / 1710	)-1755	
DL Frequency Range	728-746 / 746-757 / 86	9-894 / 1930-1995 / 2110	)-2155	
Maximum Gain	60 dB	65 dB	72 dB	
Maximum Output Power	ut Power UL 24 dBm, DL 10 dBm UL 24 dBm, DL 12 dBm			
I/O Port	N-Female & SMA-Female			
Weight	> 4.0 lb / 1.8 kg > 5.0 lb / 2.2 kg		kg	
Dimensions	4.7in x 7.8in x1.4in / 120mm x 198mm x 34mm	8.6in x 6.5in x 2in / 218mm x 165mm x 50mm		
MGC(Step Attenuation)	>25 dB /1 dB Step			
Impedance	50 ohm			
Environment Condition	IP40			
Power Supply	Input AC 100~240V, 50/60Hz, Output DC 12 V/3 A			

# 🕸 For more information

Download Signal Supervisor or enter our website.



www.hiboost.com.

a. You can download the specific user manual.

b. You can reach our technical support for help.

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