



Installation Guide Plus Series----

4K/10K Plus



# Package Contents









Signal Booster

Outside Antenna

Outdoor 49.2 ft NM-SMAM

Outdoor Cable 16.4ft SMAF-NM







Accessories for main parts are all provided to



waterproof tape to protect connections



Through-Window Cable SMA-Male to SMA-Female (No drilled hole)

# **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				
i owei	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				

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

Gauge	Band	Uplink	Downlink
LTE700	12/17	698-716MHz	728-746MHz
212700	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 Booster





#### Step 2 Connect the Booster with the App

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.

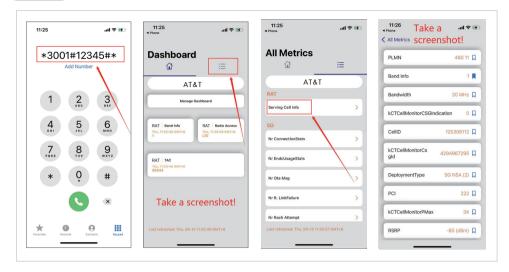
(According to the form before, you need to pay attention to Gauge LTE700)

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.



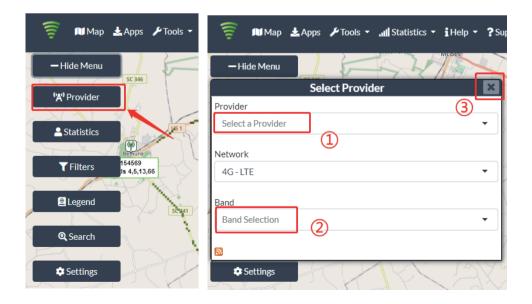
#### For ios



- (1)Dial \*3001#12345#\*
- (2) Follow the instructions, take the screenshots as required.

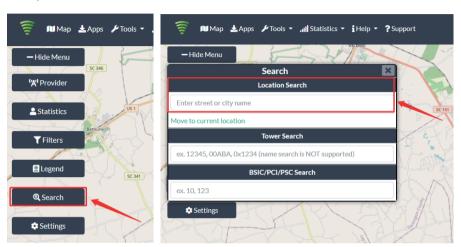
#### 3.2 Find the cell tower

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



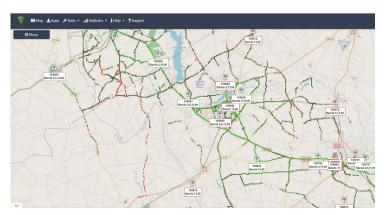
(3) Then enter the coordinate of where you are trying to install the signal booster, and press Enter key.

(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.)



(4) The map on the right will jump to the location, then you can scroll the mouse pulley, zoom it out, 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.

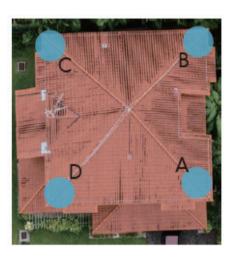


.....

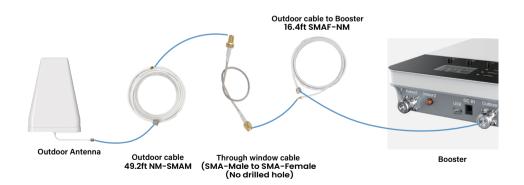
#### 3.3 Determine the outdoor antenna's position

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.

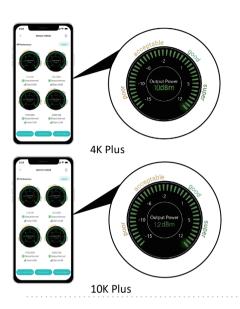


Step 4 Connect the outdoor antenna with the booster



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

#### Step 5 Adjust the outdoor antenna

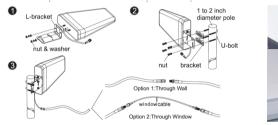


#### Notes:

- 1) Have your outdoor antenna pointed to the cell tower you found before and observe the reading on the app. Adjust the outdoor antenna accordingly.
- 2) Try to get the highest possible output power for each band and try to make 2-3 gauges turn green.
- 3) You can either observe the signal meter value (full output power is the best) or the signal description (Super is the best).
- 4) The full output power for 4k Plus is 10dbm. And the full gain is 65dB.

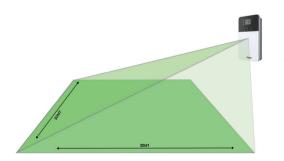
The full output power for 10k Plus is 12dbm. And the full gain is 68dB.

### Step 6 Fix the outdoor antenna direction when you get the best output power





## $Step \ 7 \ \ Install \ the \ booster \ and \ the \ cables$



Since there's a built-in indoor antenna in 4K/10K Plus, the booster shall be installed as a panel antenna. Please have your booster pointed to the area you would like to cover.

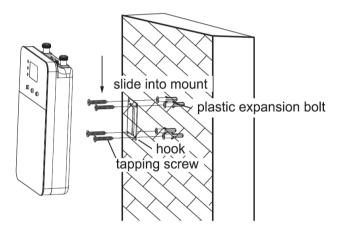
#### Step 8 Signal quality test



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 booster



Fix the booster with the provided expansion bolt and hook. Mount the signal booster in a dry and cool area, and it shall be easily accessible for maintenance.

### 4 Regular Problems and 1 normal status

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

#### **4K Plus**

	OVERLOAD						
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION		
LTE700	<60dB	>=8dBm					
CELL800	<60dB	>=8dBm	Alarm light quick blinking green or red	Outdoor signal is	Have your outdoor antenna pointed slightly away from the		
PCS1900	<60dB	>=8dBm	blinking green or red	too strong	cell tower		
AWS2100	<60dB	>=8dBm					

	LOOP BACK						
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION		
LTE700	<60dB	<8dBm					
CELL800	<60dB	<8dBm	ISO light blinking	Inadequate	1. Increase vertical and		
PCS1900	<60dB	<8dBm	green or red	separation of the indoor and outdoor	horizontal distance.  2. Make the indoor and		
AWS2100	<60dB	<8dBm		antennas	outdoor antennas face opposite directions. 3. Add barriers(e.g. walls)		

	POOR SIGNAL							
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION			
LTE700	>=60dB	/NEGATIVE	Alarm light and ISO light solid green	Έ		Try adjusting the outdoor antenna to the best direction		
CELL800	>=60dB	/NEGATIVE			Try adjusting the outdoor antenna to another cell tower     Try increasing the height of the outdoor antenna and make			
PCS1900	>=60dB	/NEGATIVE		Input signal is too weak	sure there are no barriers between the tower and the outdoor antenna			
AWS2100	>=60dB	/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 outdoor antenna again. It would be better if there are two persons and one can stay near		
PCS1900	>=60dB	>=-5dBm		<ol> <li>The Signal is from other carriers</li> </ol>			
AWS2100	>=60dB	>=-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	>=60dB	>=-5dBm	light solid green				
AWS2100	>=60dB	>=-5dBm					

### 10K Plus

	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 too strong	Have your outdoor antenna pointed slightly away from the		
PCS1900	<65dB	>=10dBm	billiking green or red	too strong	cell tower		
AWS2100	<65dB	>=10dBm					

LOOP BACK						
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION	
LTE700	<60dB	<10dBm			1. Increase vertical and	
CELL800	<60dB	<10dBm	ISO light blinking	Inadequate	horizontal distance.  2. Make the indoor and	
PCS1900	<65dB	<10dBm	green or red	separation of the indoor and outdoor antennas	outdoor antennas face opposite directions.	
AWS2100	<65dB	<10dBm			3. Add barriers(e.g. walls)	

	POOR SIGNAL						
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION		
LTE700	>=60dB	/NEGATIVE	Alarm light and ISO light solid green		Try adjusting the outdoor antenna to the best direction     Try adjusting the outdoor antenna to another cell tower     Try increasing the height of the outdoor antenna and make sure there are no barriers between the tower and the outdoor antenna		
CELL800	>=60dB	/NEGATIVE					
PCS1900	>=65dB	/NEGATIVE		Input signal is too weak			
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 outdoor antenna again. It would be better if there are two persons and one can stay near		
PCS1900	>=65dB	>=-5dBm		2. The Signal is from Other Carriers			
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	Alarm light and ISO light solid green						
CELL800	>=60dB	>=-5dBm							
PCS1900	>=65tdB	>=-5dBm							
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 Plus	4K Plus Pro	10K Plus	10K Plus Pro	
Working Band	Band 12-17 / Band 13 / Band 5 / Band 25-2 / Band 4				
UL Frequency Range(MHz)	698-716 / 776 – 787 / 824-849 / 1850-1915 / 1710-1755				
DL Frequency Range(MHz)	728-746 / 746 – 757 / 869-894 / 1930-1995 / 2110-2155				
Supported Standards	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE, 5G and all cellular standards				
Max. Gain	65 dB		68 dB		
Max. output power	DL 10 dBm		DL 12 dBm		
MGC (Step Attenuation )	≥ 25 dB / 1 dB step				
I/O Port	N-Female & SMA-Female				
Impedance	50 ohm				
Environment Conditions	IP40				
Dimensions	6*9.7*1.4 in / 152*246*36mm				
Weight	≤ 5.0 lbs / 2 kg				
Power Supply	Input AC100~240 V, 50/60 Hz, 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.

