# HiBOOST

# Installation Guide
## Smart Link Series————

# 15K Smart Link Deluxe

# Package Contents

| | | | | |
|---|---|---|---|---|
| Signal Booster | Outdoor Antenna | 50ft Outdoor Cable | Indoor Antenna*2 | 49.2' Indoor Cable<br>30' Indoor Cable |

| | | | |
|---|---|---|---|
| Power Supply | Accessories for main parts are all provided | waterproof tape<br>to protect connections | Bluetooth and Wi-Fi antenna |
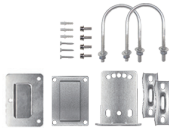
# Booster Light Patterns

| LED STATUS INDICATORS | | |
|---|---|---|
| LED | STATUS | INDICATION |
| ALARM | Solid Green | Normal |
| | Slow Flashing Green | Slight Overload |
| | Quick Flashing Green | Overload |
| | Quick Flashing Red | Booster automatically shut off due to strong overload |
| Power | Green | Normal |
| | Off | DC Power Problem |
| ISO | Solid Green | Normal |
| | Slow Flashing Green | Slight Loopback |
| | 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 |
| Wi-Fi | Solid Green | Wi-Fi Disconnected |
| | 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
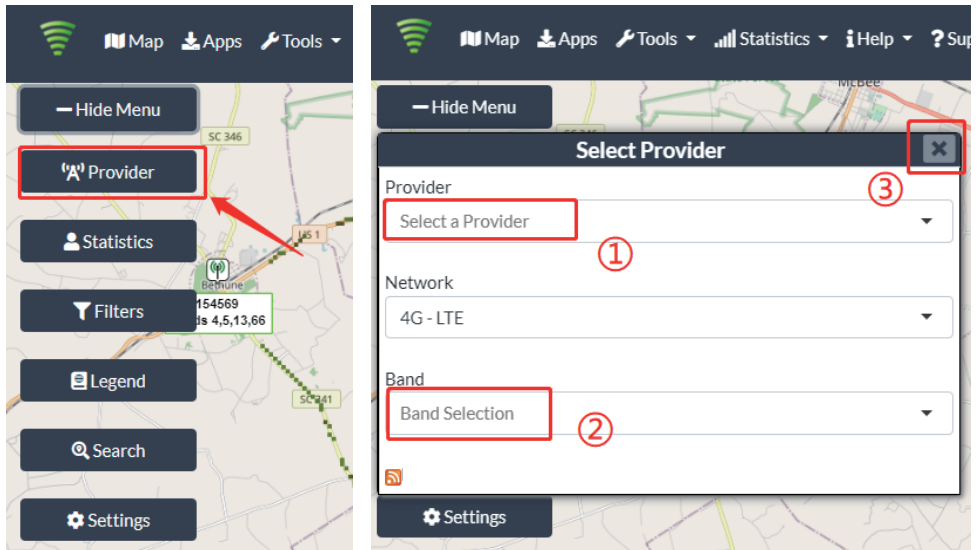
Note: Please take screenshots at this stage.
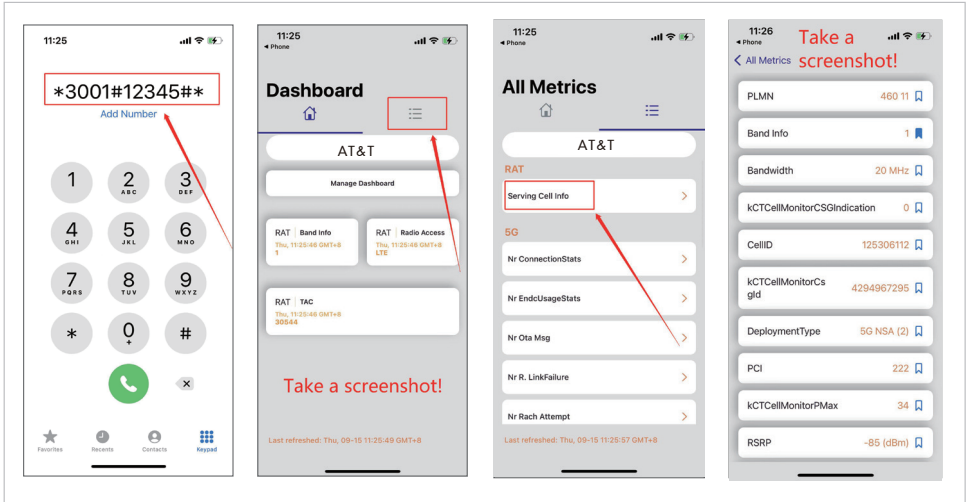
(1) Dial *3001#12345#*

(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.)
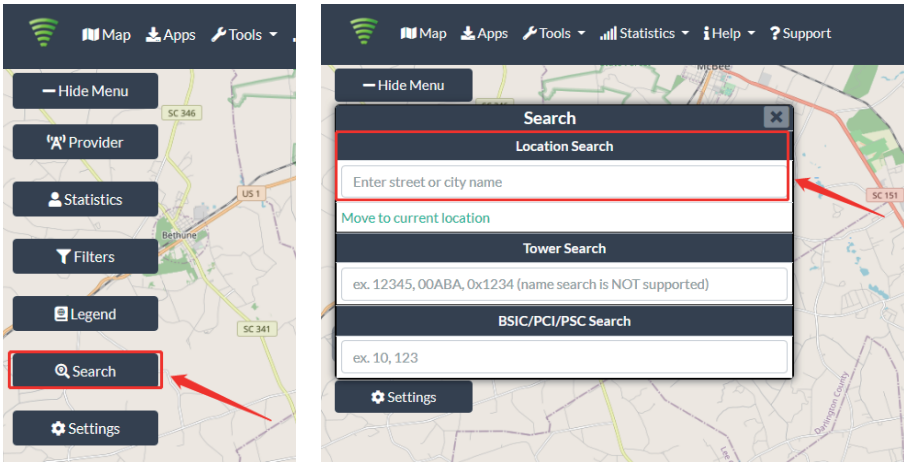


(4) After the map jumps to the location, you can scroll the mouse pulley and zoom it out, then you will see the tower near the location. It would be better to take a screenshot of this page to guide the following installing steps. Should you have any questions, please contact our tech support.
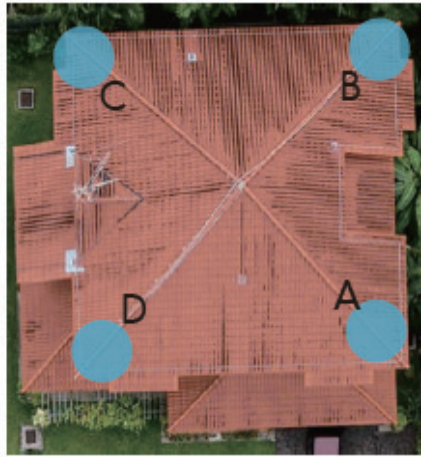
Note: If you need help finding the tower, please contact our tech support and provide your carrier, band and screenshots taken in the last steps.
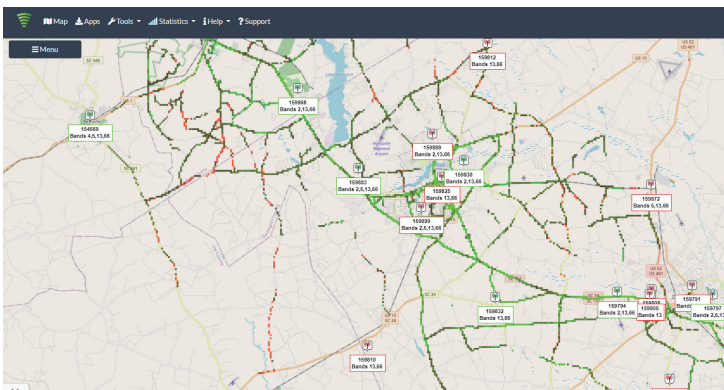
### 3.3 Determine the outdoor antenna's position

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.
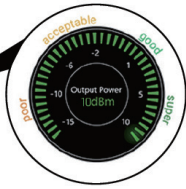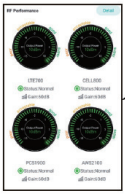


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*Step 4*  *Connect the outdoor antenna with the booster*



| Outside Antenna | 50' Outdoor Cable | 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.
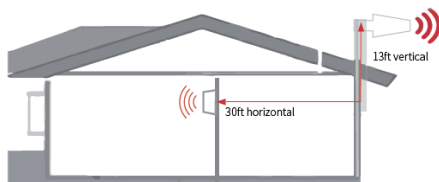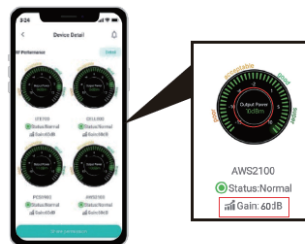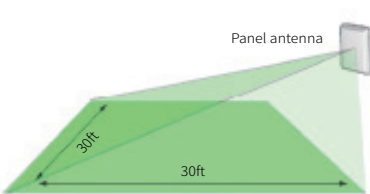
Notes:

(1) The output power should be the higher the better.

(2) The full output power for 15k Smartlink Deluxe is 13dBm. And the full gain is 70dB.
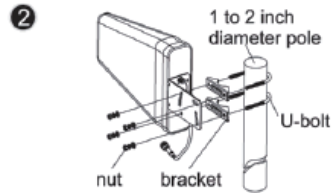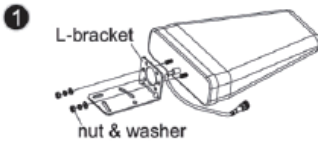


## Step 6   Connect the 1st indoor antenna with the booster



Booster          49.2' Indoor Cable          Indoor Antennna

## Step 7   Adjust the indoor antenna



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
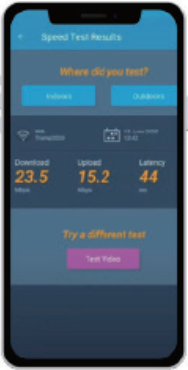


You could do the following:

(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 1st Indoor antenna



tapping screw    hook

plastic expansion
bolt

slide into mount
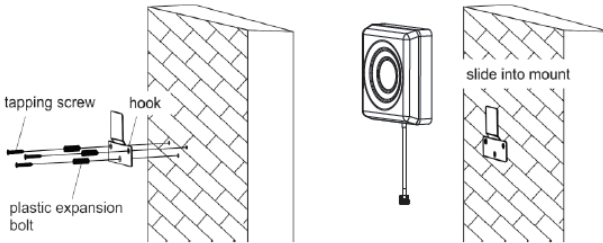
Fix the indoor antenna with the provided expansion bolt and hook.

## Step 10 Connect the 2nd indoor antenna with the booster



Booster                     30' Indoor Cable                    Indoor Antennna

Repeat the process from Step 7 to Step 8.

## Step 11 *Fix the 2nd Indoor Antenna and the Booster*
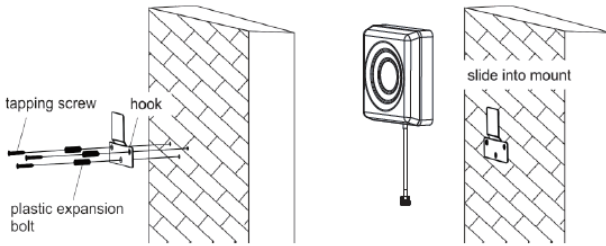


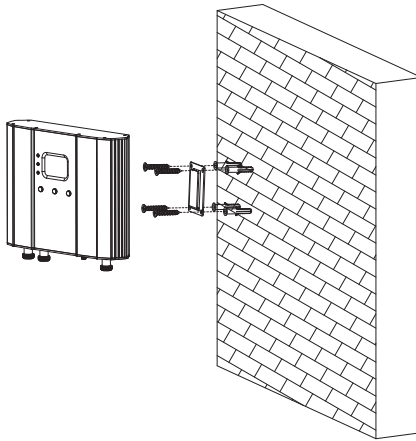Fix the indoor antenna with the provided expansion bolt and hook.



Fix the ibooster 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 | Alarm light quick blinking green or red | Outdoor signal is too strong | Have your outdoor antenna pointed slightly away from the cell tower |
| CELL800 | <60dB | >=10dBm | | | |
| PCS1900 | <65dB | >=10dBm | | | |
| AWS2100 | <65dB | >=10dBm | | | |

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

| POOR SIGNAL | | | | | |
|---|---|---|---|---|---|
| | DL GAIN | OUTPUT POWER | LED LIGHT PATTERN | REASON | SOLUTION |
| LTE700 | >=60dB | --/NEGATIVE | Alarm light and ISO light solid green | Input signal is too weak | 1、Try adjusting the outdoor antenna to the best direction 2、Try adjusting the outdoor antenna to another cell tower 3、Try increasing the height of the outdoor antenna and make sure there are no barriers between the tower and the outdoor antenna Please try these solutions until the output power reaches or is over -5dBm. |
| CELL800 | >=60dB | --/NEGATIVE | | | |
| PCS1900 | >=65dB | --/NEGATIVE | | | |
| AWS2100 | >=65dB | --/NEGATIVE | | | |

| Normal but No Boosted Signal | | | | | |
|---|---|---|---|---|---|
| | DL GAIN | OUTPUT POWER | LED LIGHT PATTERN | REASON | SOLUTION |
| LTE700 | >=60dB | >=-5dBm | Alarm light and ISO light solid green | 1、The band is not supported 2、The Signal is from Other Carriers | Check the band you are using again. If it stays at band66,get 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 the indoor antenna to check if the signal is boosted. |
| CELL800 | >=60dB | >=-5dBm | | | |
| PCS1900 | >=65dB | >=-5dBm | | | |
| AWS2100 | >=65dB | >=-5dBm | | | |

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

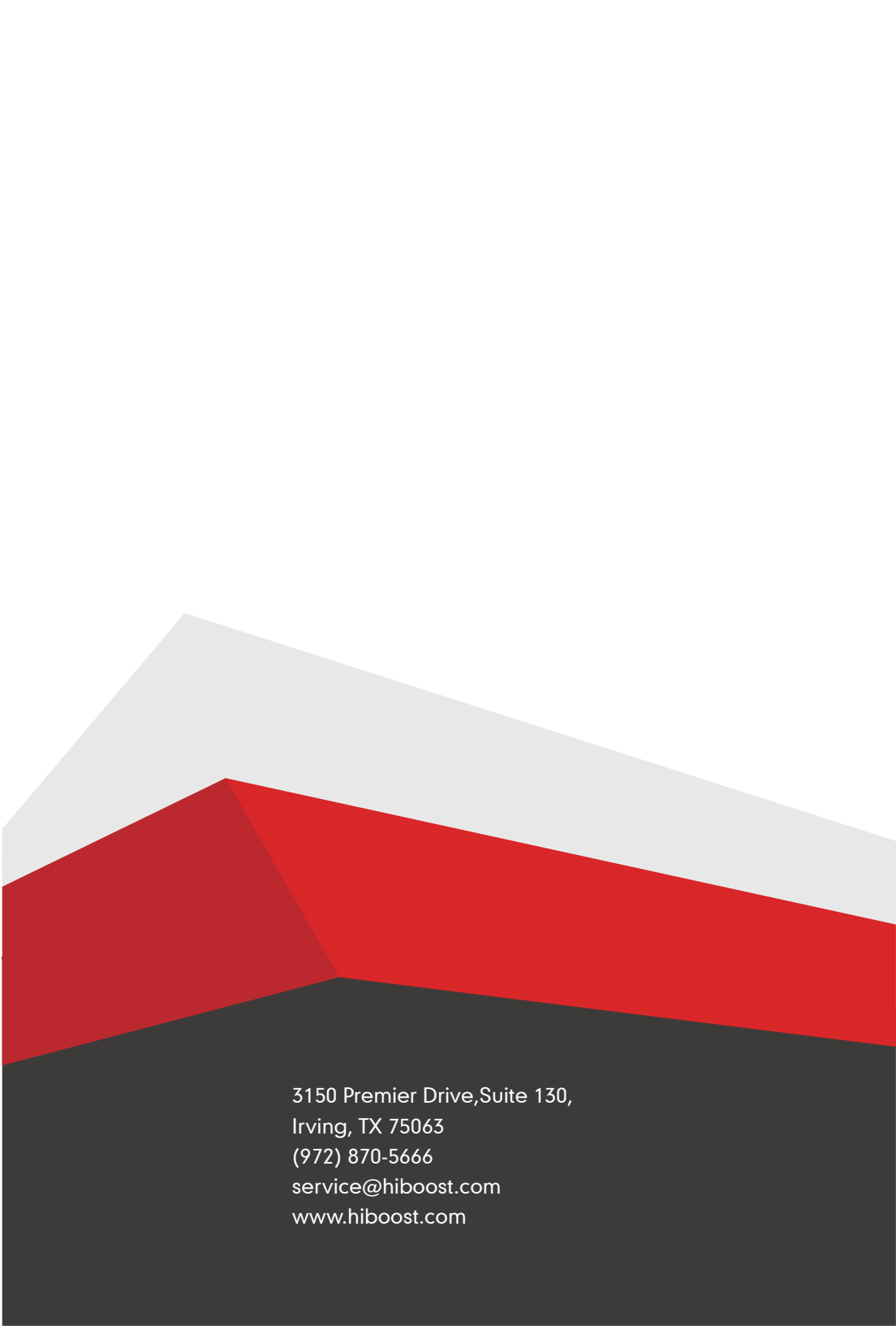| Model No. | HiBoost 15K Smart Link Deluxe |
|---|---|
| Working Band | Band 12/17/ Band 13/ Band 5/ Band 25/2/ Band 4 |
| UL Frequency Range(MHz) | 698-716 / 776-787 / 824-849 / 1850-1915 / 1710-1755 |
| DL Frequency Range(MHz) | 728-746 / 746-757 / 869-894 / 1930-1995 / 2110-2155 |
| Supported Standards | CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE ,5G and all cellular standards |
| Max. Gain | 70 dB |
| Max. output power | UL 17dBm, DL 13dBm |
| MGC (Step Attenuation ) | ≥25 dB / 1 dB step |
| I/O Port | SMA-Female&N-Female |
| Impedance | 50 ohm |
| Environment Conditions | IP40 |
| Dimensions | 218 mm x 165 mm x 50 mm |
| Weight | ≤5.0 lb / 2.2 kg |
| Power Supply | Input AC 100~240 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.

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