3dBi antenna professional installation instructions

1 Technical Parameters

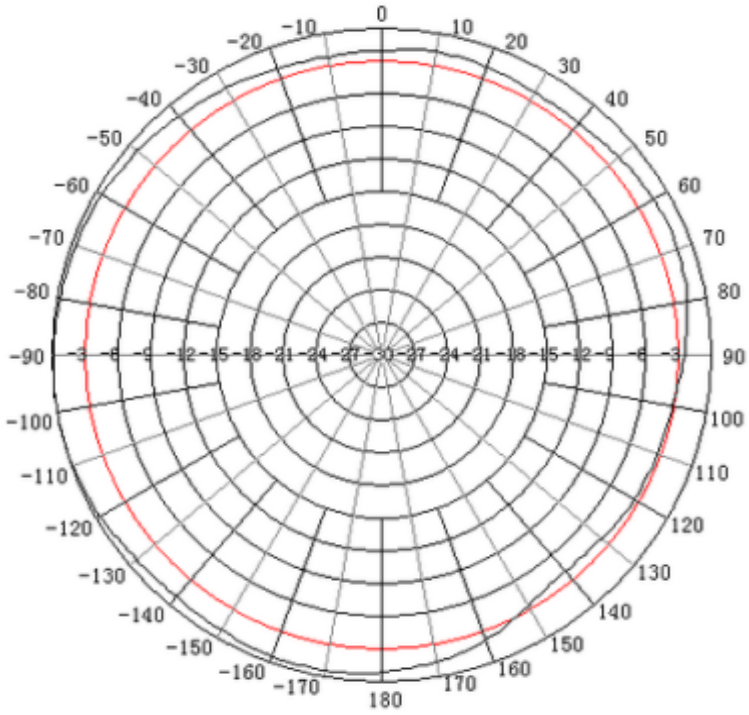
3dbi antenna mainly apply to outdoor application scenarios, connect to outdoor AP 5GHz RF port by using a SMA type connector.

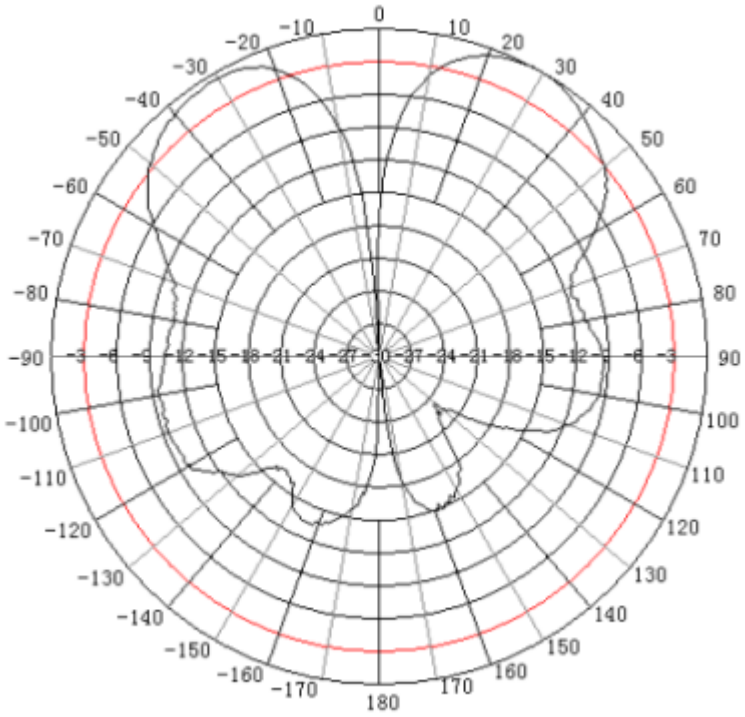
Fig.1-1 3dbi antenna appearing diagram.

Chart 1-1 Technical Parameters

Electrical Specifications	
Model	AG-011420-0220-A0-0000
Frequency range	5.15~5.8G
Impedance(Ω)	50Ω
VSWR	≤2.0
Gain	3.0dBi
Maximum input power	1w
Electric Strength test	1KV
Polarization	Vertical
Radiation direction	Omni
Connector	RPSMA-J
Mechanical Specifications	
Antenna Dimension	155±3mm
Coaxial-cable	RG178
Operating temperature	-30℃~65℃
Storage temperature	-30℃~75℃

Below is the far-field pattern in horizontal direction and in vertical direction.





2 Safety Precautions

Warning!

Antenna installation is dangerous to some extent, please read over the below safety precautions before installation, so to avoid unnecessary injuries and deaths.

Please set the antenna location far away from electricity such as power supply wire, street lamp or power supply box. Installer must pay attention not to touch the power supply wire, otherwise it may cause severe casualty.

To choose a safe location where get far away from the power line or other cable. This is to avoid electric shock and danger caused by cable winding.

To avoid install the antenna by just one installer. The install location and steps need to be confirmed by several installer before installation.

When need to erect poles, pay attention to cooperation between installers.

Must pay attention to: Do not use metal ladder; Not to install in wet or wind weather, in the mean time, isolative cloths, shoes and glove must be wear-on by installer.

If the antenna, RF cable or other spare parts falling from the high place, please elude as quickly as you can, so as to avoid unnecessary injury and deaths.

When the antenna need to power up, please let the professional to do it, do not connect by yourself.

Any emergency such as electric shock must seek help at once.

3 Installation Precautions

3dbi antenna is indoor fan-shape covered that suitable for radiating around the indoor ceiling. We suggest installing it in the middle of ceiling for windows or doors may harm the signal quality. According to signal quality requirement, installer must figure out how many 3dbi antennas should be installed at certain distance intervals. At the same time, the install

location should be far away from the metal obstacles or wall shielding net, etc.

4 Proper locations to install 3dbi antenna.

3dbi antennas mainly apply to indoor ceiling such as halls, meeting room and corridor, at the mean time the antenna location be far away from the obstacles or metal objects such as central heating or metallic conduit. Generally speaking, the higher it be, the more area it will cover, so the more effective it will be. Please use short cable (as shorter as possible) to connect antenna and AP.

5 Antenna Installation

3dbi antenna is mainly installed indoors, while other tools such as monkey wrench, cross screw driver and “-” type screw driver need to be prepared by yourself.

5.1 Installation Tools

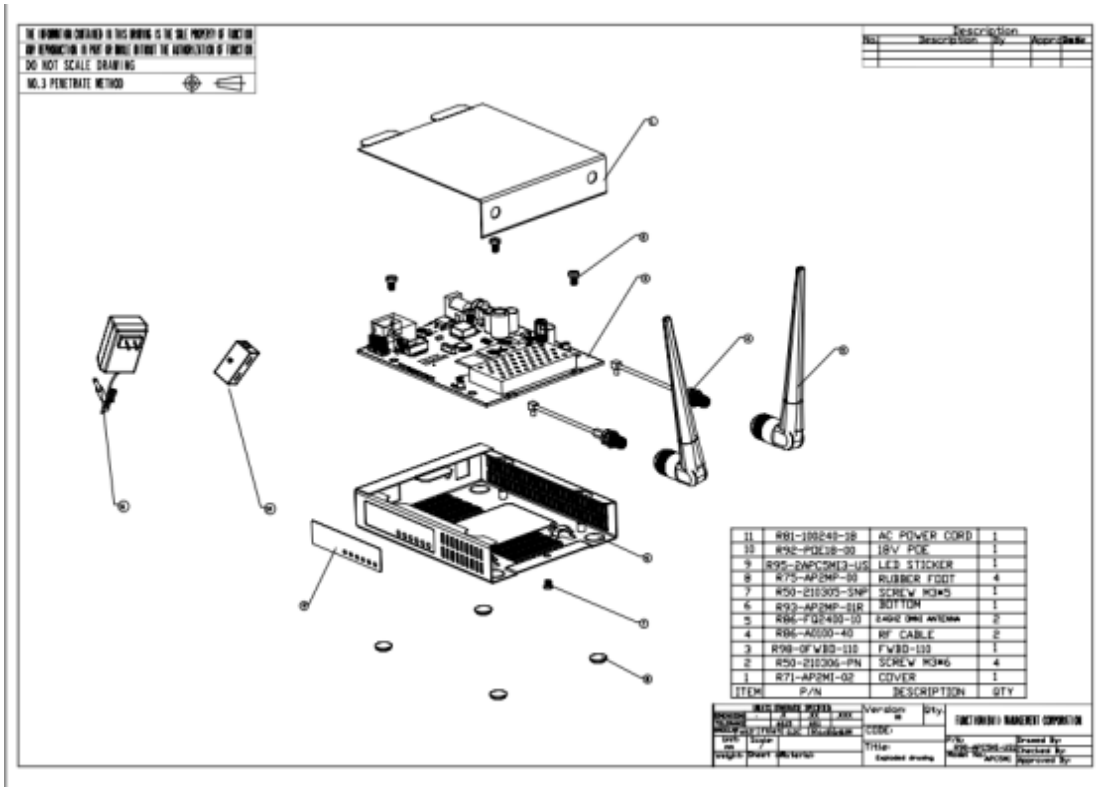
1、monkey wrench

2、“+” type screw driver and “-” type screw driver

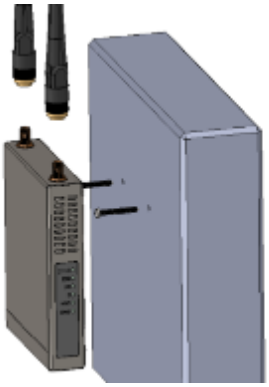
5.2 RF cable requirements

Generally we adopt the RF cable as short as possible. We suggest adopting high quality and low loss RF cable. The wastage of coaxial-cable will be magnified if to increase the frequency, the signal will also be decay in a large amount. So the length of cable should be as shorter as it can be, so to avoid unnecessary wastage.

5.3 Antenna installing steps.



Step 1. Attach the unit by a two screws on a wall and push it downwards until it clicks into position:



Step 2. Connect omni antennas (item C in the **错误！未找到引用源。**), power cord, PoE (item D and E in the **错误！未找到引用源。**), and Ethernet cables to the APC:

6 Antenna Power-level Setting

This document provides mandatory radio power-level settings that must be configured to ensure that your device complies with regulatory requirements in your region.

6.1 Radio power-level setting

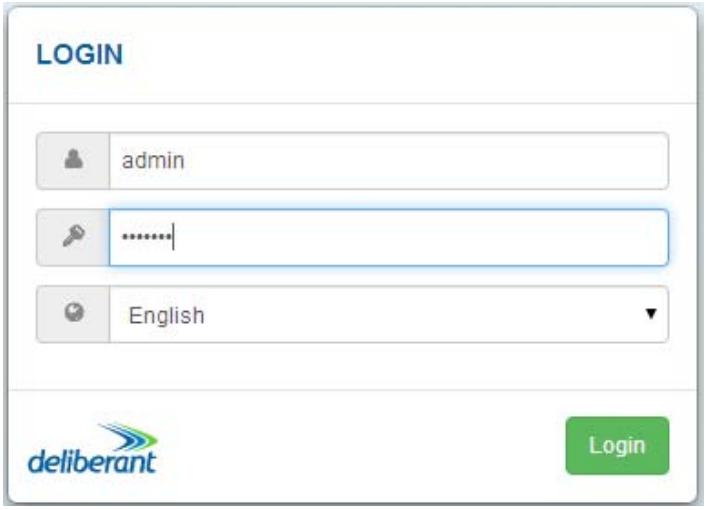
1.LOGIN

he default product address is 192.168.2.66.

The default administrator login settings are:

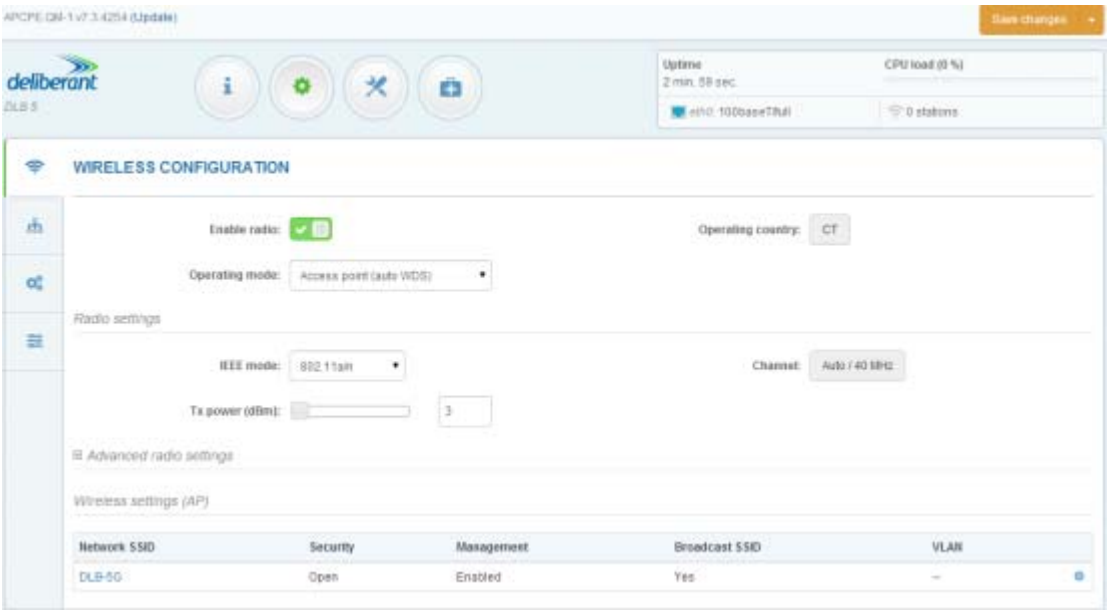
User：admin

Password：admin01



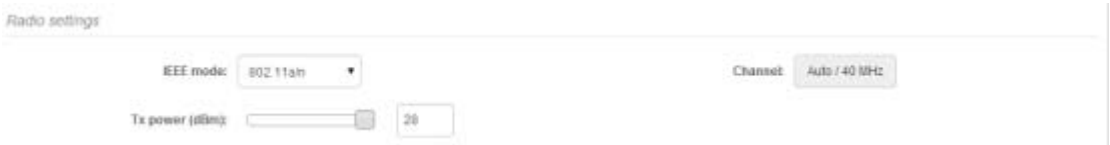
2 Radio Power

Tx Power（dBm）:3dBi



3 Different Frequency of the power setting

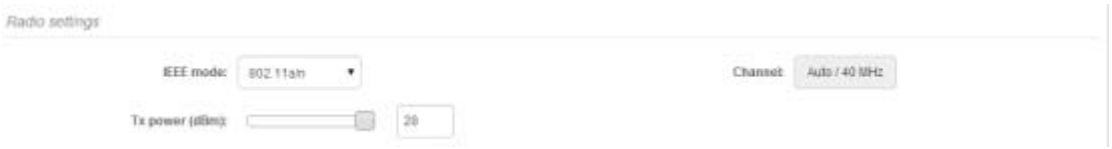
5150-5250MHZ:28dBi



	Channel	TX limit, dBm	EIRP limit, dBm	DFS/ATPC required
☑	36 (5180 MHz)	28	63	No
☑	37 (5185 MHz)	28	63	No
☑	38 (5190 MHz)	28	63	No
☑	39 (5195 MHz)	28	63	No
☑	40 (5200 MHz)	28	63	No
☑	41 (5205 MHz)	28	63	No
☑	42 (5210 MHz)	28	63	No
☑	43 (5215 MHz)	28	63	No
☑	44 (5220 MHz)	28	63	No
☑	45 (5225 MHz)	28	63	No

Select Cancel

5725-5850MHZ:28dBi



☑	147 (5735 MHz)	28	63	No
☑	148 (5740 MHz)	28	63	No
☑	149 (5745 MHz)	28	63	No
☑	150 (5750 MHz)	28	63	No
☑	151 (5755 MHz)	28	63	No
☑	152 (5760 MHz)	28	63	No
☑	153 (5765 MHz)	28	63	No
☑	154 (5770 MHz)	28	63	No
☑	155 (5775 MHz)	28	63	No
☑	156 (5780 MHz)	28	63	No
☑	157 (5785 MHz)	28	63	No

Select Cancel

4 Select save and apply

Click on the Save changes and apply.