30dBi antenna professional installation instructions

1 Technical Parameters

30dbi antenna mainly apply to outdoor application scenarios, connect to outdoor AP 5GHz RF port by using a N type connector.

Fig.1-1 30dbi antenna appearing diagram

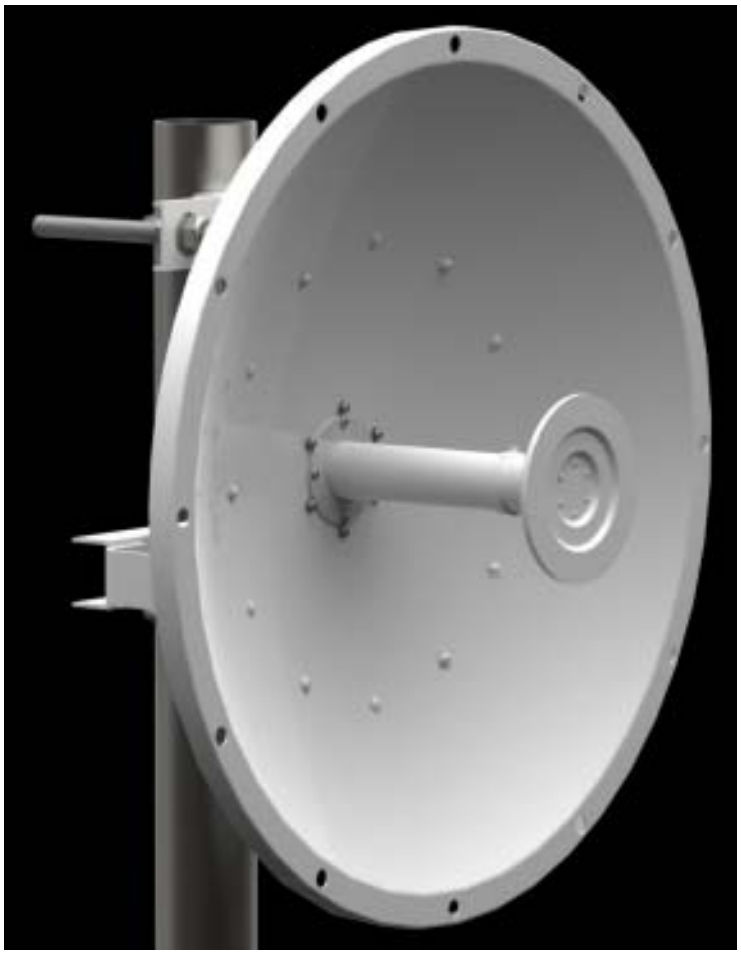


Chart 1-1 Technical Parameters

Electrical Specifications

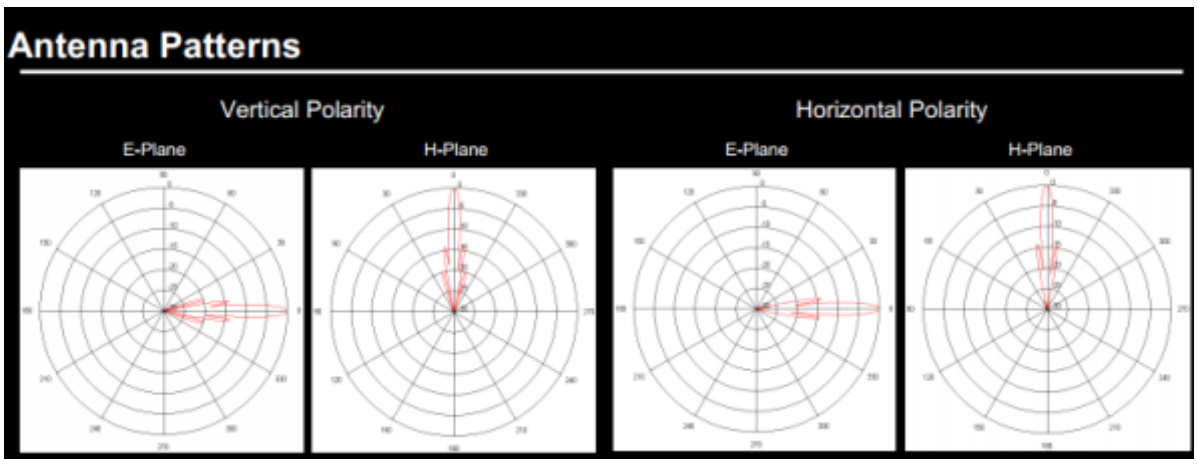
Frequency Range	4.94-5.875 GHz	**Port to Port Isolation**	35dB min
Gain	30 dBi typ	**Front-to-Back Ratio**	>30 dB
Polarization	Dual Linear – Vertical and Horizontal	**Cross Polarization**	>30 dB
3dB Beamwidth	6 deg	**Power Rating**	100 watts
ETSI	EN 302 326 DN1, DN2, DN3, DN5	**Impedance**	50 ohms
VSWR	≤1.5:1 typ, ≤1.8:1 max	**Mechanical Downtilt**	30 deg

Physical/Environmental Specifications

Diameter x Depth	25.6 x 13.7in (65 x 35cm)	**Wind Load (125 mph)**	176 lbs 116 lbs with radome
Weight	16 lbs (7.2kg)	**Operating Temperature**	-49°F to 158°F (-45°C to 70°C)
Reflector	Aluminum	**Pole Mount Diameter Range**	2.0 to 4.5in (5.0 to 11.4cm)
Outdoor Rating	ETSI EN 300 019-2-4	**Connector (2)**	Type-N Jack
Wind Survivability	125mph (201kph)		

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

Antenna Patterns



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

30dbi antenna is outdoor fan-shape covered and suitable for using at fan-shaped overlapping region. So we suggest it should be used at top of the building or mountain. No restraining mass should be place before the location of 19dbi antenna.

4 Proper location to install 30dbi antenna.

30dbi antenna mainly used in outdoor such as top of building or top of the mountain. Generally speaking, the higher it be, the more area it will cover, so the more effective it will be.

5 Antenna Installation

30dbi antenna is packed with all kinds of spare parts, 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

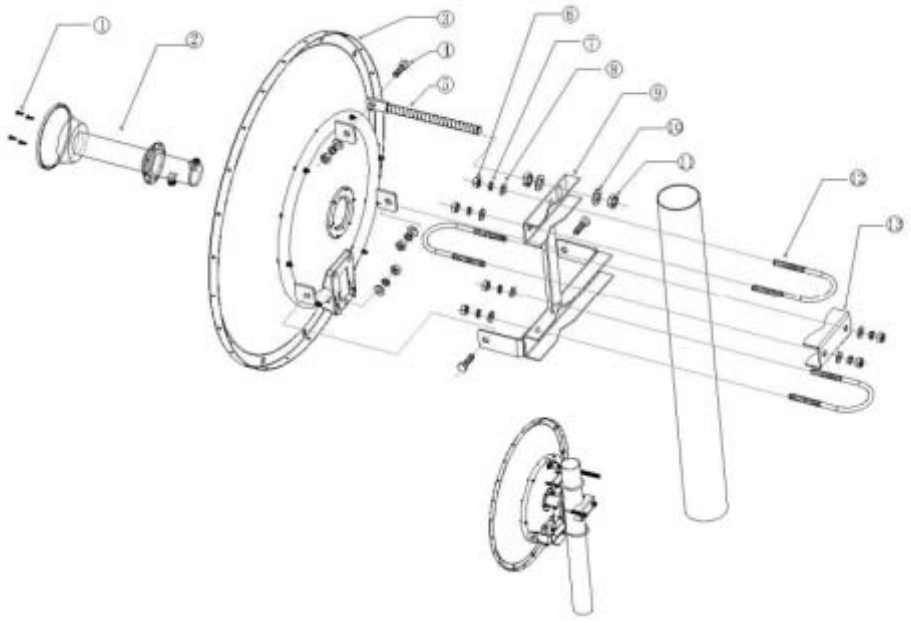
2、“+” type screw driver and “-” type screw driver

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　Part 1 and part 2 assembly first, Parts with a nut fixed tightly.

Step 2　The module connected to the part 3.

Step 3　Part 4 and part 5 connection dishes.

Step 4　Use of part 6, 7, 8, 9 fixed dishes with parts

Step 5　The parts 10, 11, 12, 13 fixed the antenna .The fixed link The fixed rod through the U between code ring. Nut and tighten, tighten the antenna on the fixed link.

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

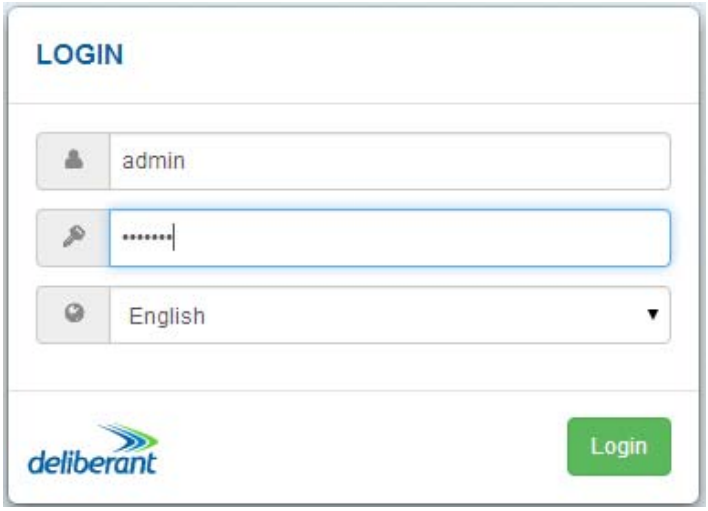
1.LOGIN

he default product address is 192.168.2.66.

The default administrator login settings are:

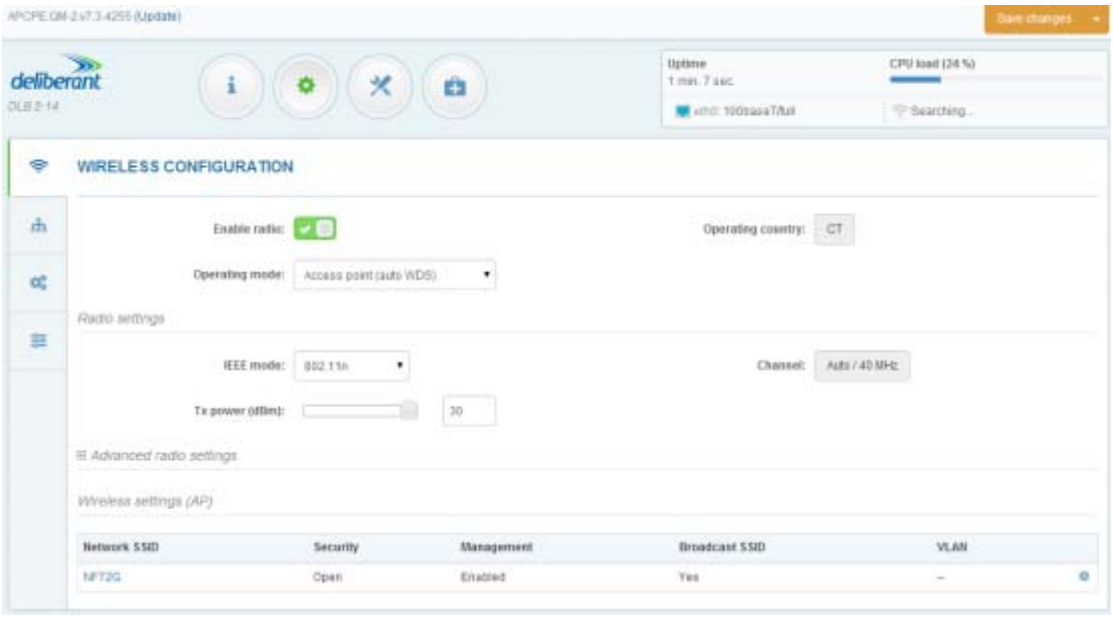
User：admin

Password：admin01



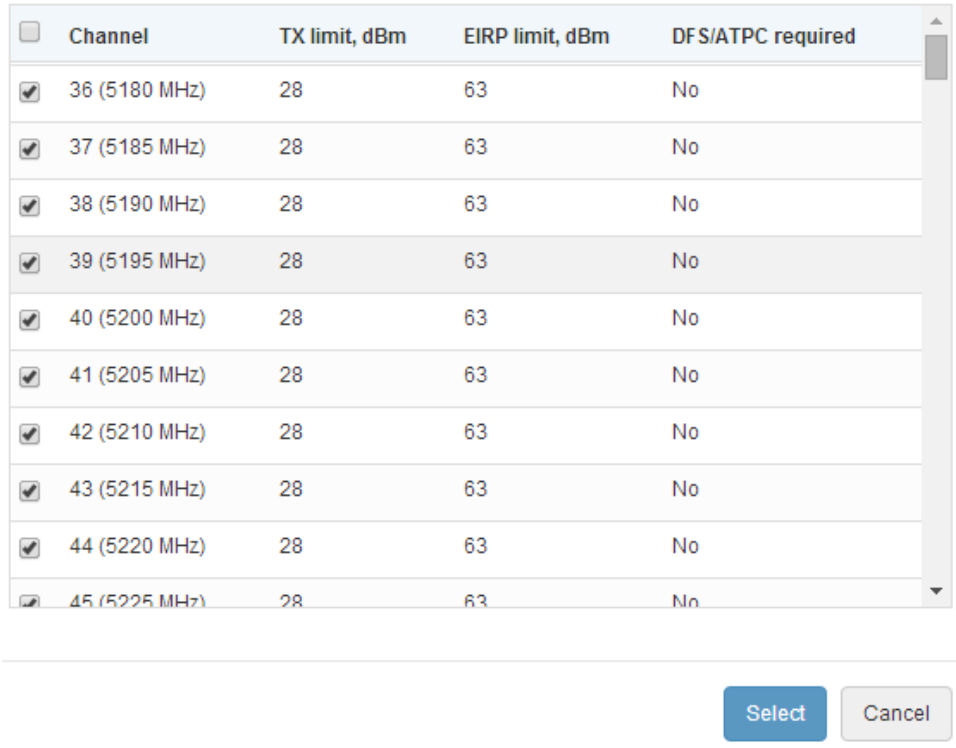
2 Radio Power

Tx Power（dBm）:30dBi



3 Different Frequency of the power setting

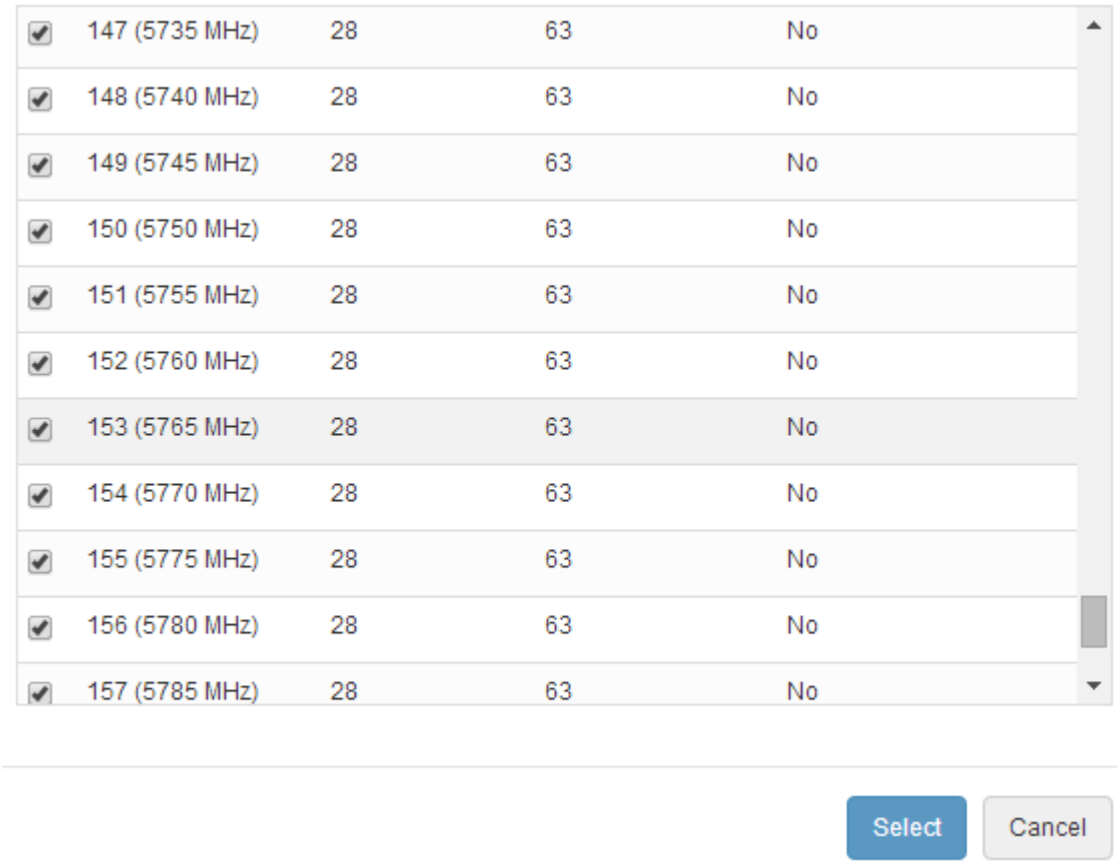
5150-5250MHZ:4dBi



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:20dBi



4 Select save and apply

Click on the Save changes and apply.