

# 15dBi antenna professional installation instructions

## 1 Technical Parameters

15dBi antenna mainly apply to outdoor application scenarios,  
connect to outdoor AP 5GHz RF port by using a SMA type connector.

Fig.1-1 15dBi antenna appearing diagram.

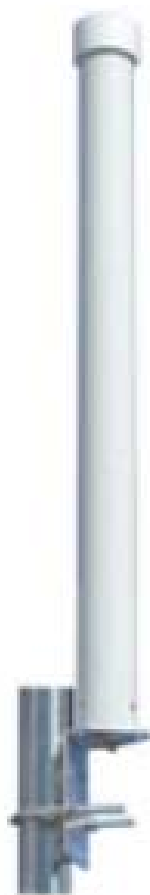


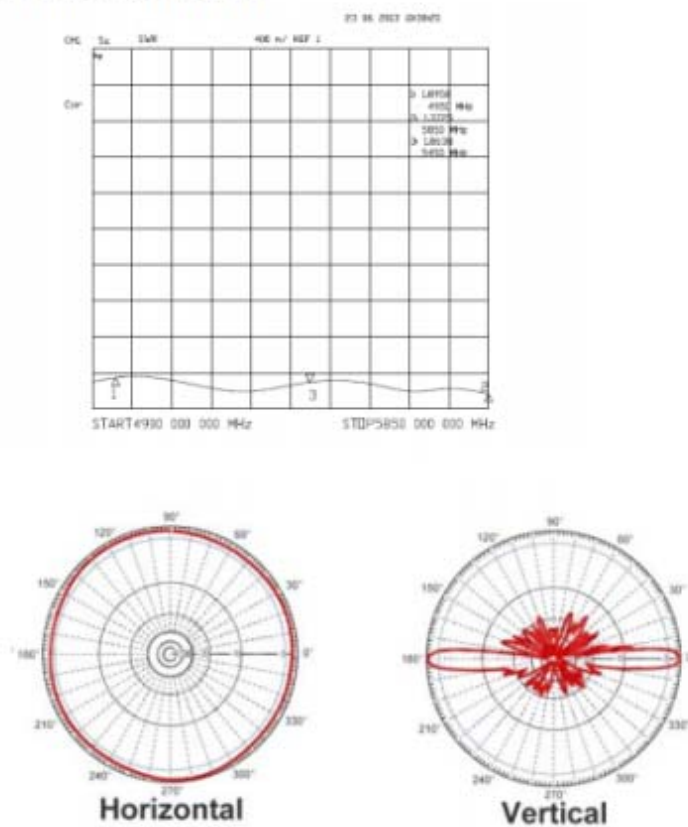
Chart 1-1 Technical Parameters

## 5.8G MIMO Fibre-glass epoxy antenna

Electrical Specifications	
Model	AC-Q58F15
Frequency range	5725-5850MHz
Gain	15dBi
Horizontal Beamwidth	360°
Vertical Beamwidth	3.5°
VSWR	≤1.5
Polarization	Vertical
Max Power	100W
Nominal Impedance	50Ω
Operating temperature	-40℃ to+60℃
Connector	N-K
Installation method	Pole
Mechanical Specifications	
Dia. Of antenna	Ø38×950mm
Weight	0.85KG
Dia. Of Pole	Ø40~Ø50 mm
Wind Survability	241Km/h

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

### Electrical test report



## 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

15dbi antenna can covered all directions in outdoor, so we suggest to install at the top of buildings or mountains, also the antenna location should be far away from the obvious obstacles.

#### 4 Proper location to install 15dbi antenna.

15dbi antennas mainly apply to outdoor such as the top of buildings and mountains. Generally speaking, the higher it be, the more area it will cover, so the more effective it will be.

## 5 Antenna Installation

15dbi 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

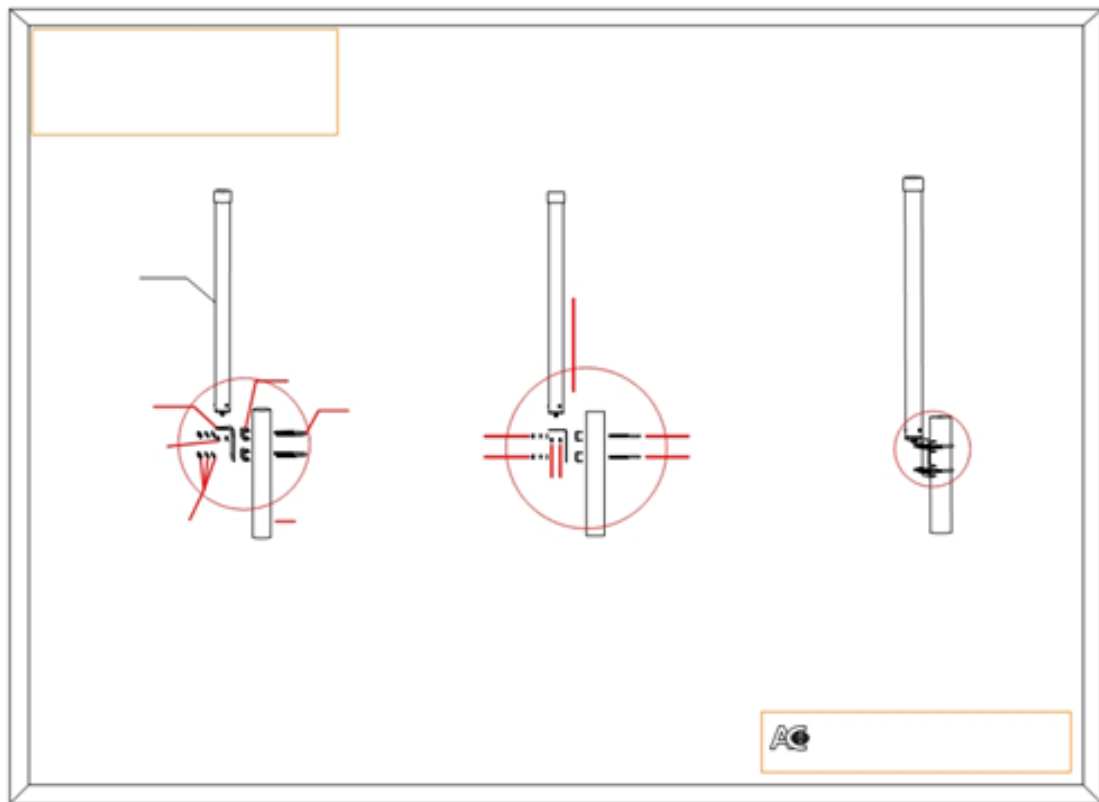
2、“+” type screw driver and “-” type screw driver

### 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 as to avoid unnecessary wastage.

### 5.3 Antenna installing steps.

如图 1-3



## 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

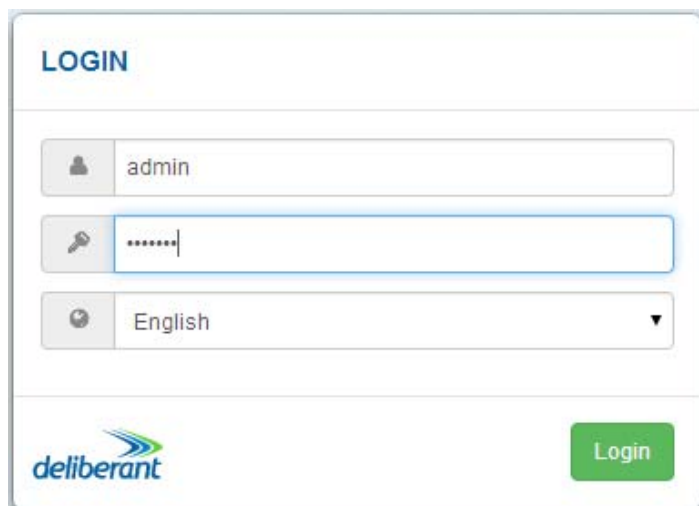
### 1. LOGIN

The default product address is 192.168.2.66.

The default administrator login settings are:

User: admin

Password: admin01



A screenshot of a web-based login form titled "LOGIN" in blue text. The form contains three input fields: a username field with a person icon and the text "admin", a password field with a key icon and masked characters ".....", and a language selection dropdown with a globe icon and the text "English". At the bottom left is the "deliberant" logo, and at the bottom right is a green "Login" button.

### 2 Radio Power

Tx Power (dBm) :15dBi

APCPE ON-1 v7.3.4254 (Update) Save changes

**deliberant** uptime: 42 min, 44 sec CPU load (0 %)

eth0: 100baseT/Full 0 stations

### WIRELESS CONFIGURATION

Enable radio: ☒ Operating country: CT

Operating mode: Access point (auto WDS)

Radio settings

IEEE mode: 802.11a/n Channel: 161 (5805 MHz) / 40 MHz

Tx power (dBm):

Advanced radio settings

Wireless settings (AP)

Network SSID	Security	Management	Broadcast SSID	VLAN
DLB-5G	Open	Enabled	Yes	-

### 3 Different Frequency of the power setting

5150-5250MHZ:19dBi

IEEE mode: 802.11a/n Channel: 161 (5805 MHz) / 40 MHz

Tx power (dBm):

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

Select Cancel



5725-5850MHZ:26dBi

Radio settings

IEEE mode: 802.11a/n Channel: 161 (5805 MHz) / 40 MHz

Tx power (dBm): 26

<input checked="" type="checkbox"/>	147 (5735 MHz)	28	63	No
<input checked="" type="checkbox"/>	148 (5740 MHz)	28	63	No
<input checked="" type="checkbox"/>	149 (5745 MHz)	28	63	No
<input checked="" type="checkbox"/>	150 (5750 MHz)	28	63	No
<input checked="" type="checkbox"/>	151 (5755 MHz)	28	63	No
<input checked="" type="checkbox"/>	152 (5760 MHz)	28	63	No
<input checked="" type="checkbox"/>	153 (5765 MHz)	28	63	No
<input checked="" type="checkbox"/>	154 (5770 MHz)	28	63	No
<input checked="" type="checkbox"/>	155 (5775 MHz)	28	63	No
<input checked="" type="checkbox"/>	156 (5780 MHz)	28	63	No
<input checked="" type="checkbox"/>	157 (5785 MHz)	28	63	No


Select Cancel

4 Select save and apply

Click on the Save changes and apply.

APCPE QM-1 v7.3.4254 (Update) Save changes

  
DLB 5



Uptime  
12 min. 34 sec

CPU load (0 %)

eth0 100baseTFull

0 stations

Configuration saved