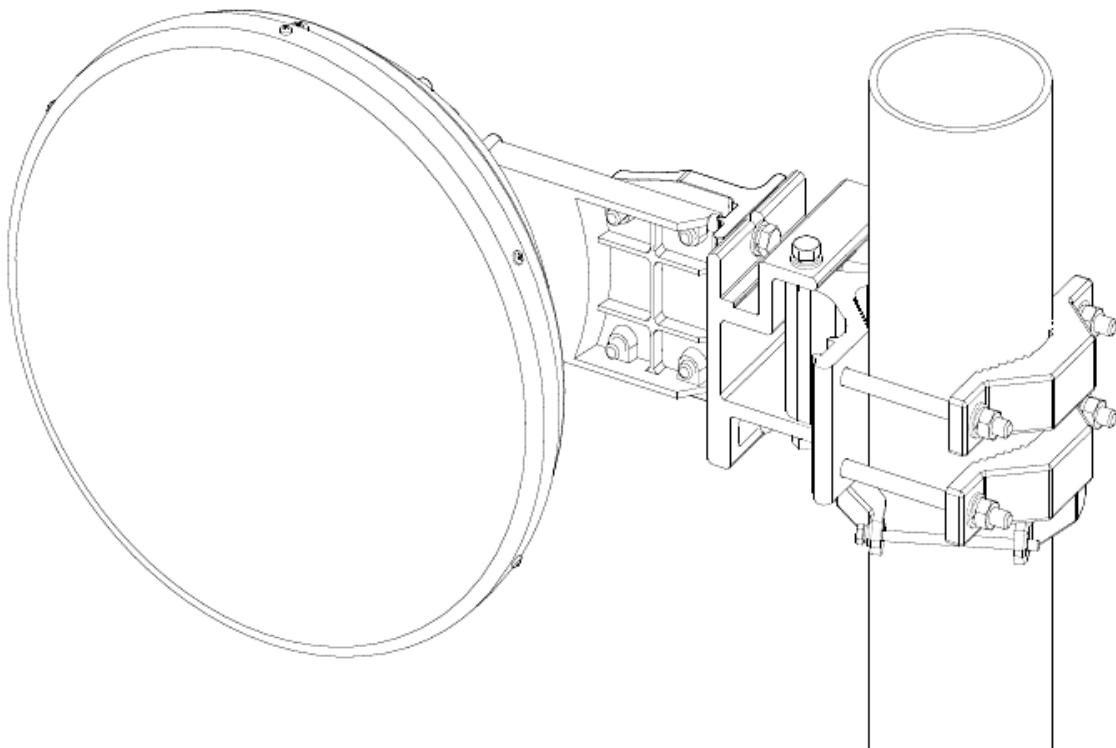


# Installation Instructions

For 0.3m Ultra-high Performance Antenna

30 cm antenna Z24A30T37301



## Remarks: Before Installation, please read the instruction carefully.

- This instruction book is for the installation of 0.3m ultra-high performance microwave antenna.
- Installation, maintenance and removal of antenna system are suggested being carried out by a qualified experienced personnel.
- To guarantee performance, the antenna system is suggested being inspected once a year by a qualified personnel.

## 1. Requirement of Installation

### 1.1 Mounting Pole

Microwave antenna can be fixed to the Mounting Pole (self-feed) of diameter from  $\varnothing 50$  mm to  $\varnothing 114$  mm.

### 1.2 Tools Required for Installation

20×200 Adjustable Spanner (Used for bolt M10-M12)

17-19 Open-end Spanners (Used for bolt M10-M12)

3mm L-Spanner (Used for Screw M4)

Cross Screw-driver (Used for M3-M5)

Torque Spanner (Recommended)

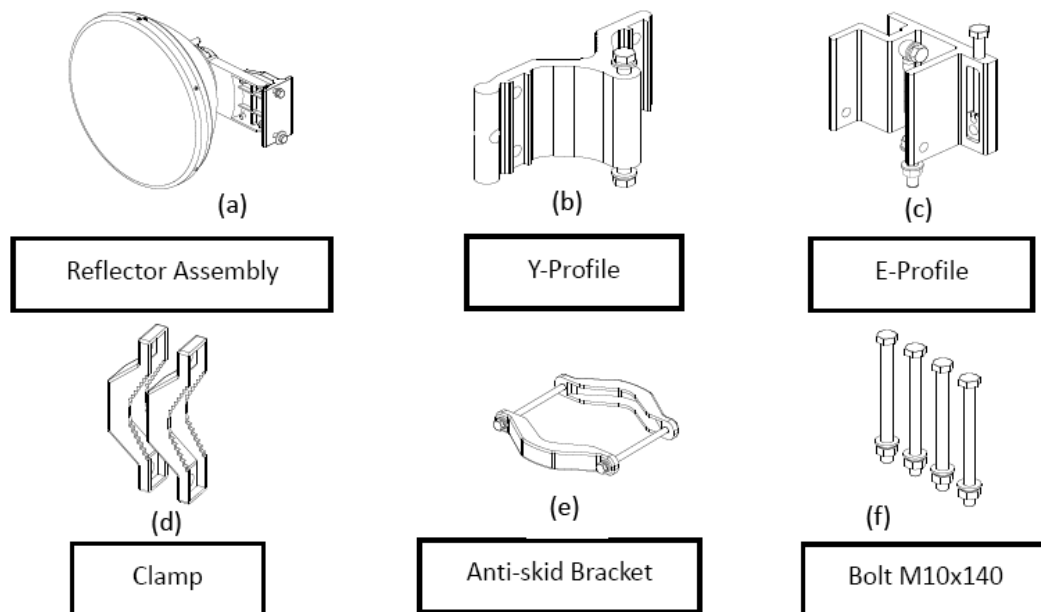
### 1.3 Torque Parameters of Standard Parts

Customer can use these torque parameters as reference to assembly the antenna.

**Table of Torque Parameters**

NO.	Types of Standard Parts	Torque (N·m)
1	M3	0.6
2	M4	1.3
3	M5	3
4	M6	5
5	M10	28

## 2. Open the Package and Identify Parts



**Fig 2.1 Parts List**

### 3. Connect Hanging Bracket and Assembly Reflector

#### 3.1 Mount Hanging Bracket

**Step1:** Connect Y Type and E Type Extruded Profile with two M10×25 bolts, and then put two M10×140 bolts in the mounting hole of Y Type Extruded Profile (show in Fig 3.1).

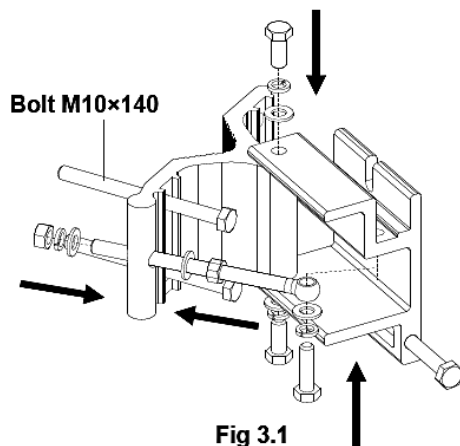


Fig 3.1

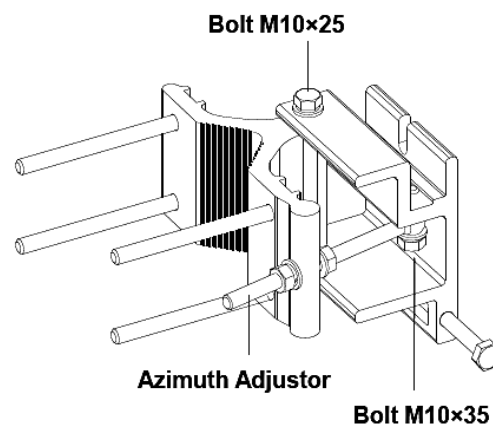


Fig 3.2

**Step2:** Put Azimuth Adjustor in another mounting hole of Y Type Extruded Profile, and then use Bolt M10×35 to fix it to the E Type Extruded Profile (shown in Fig 3.2).

**Step3:** Connect the two clamps to the four pieces of M10X140 bolt as shown in Fig 3.3. Screw the nuts on the bolts into a position around 20mm to stabilize the clamps.

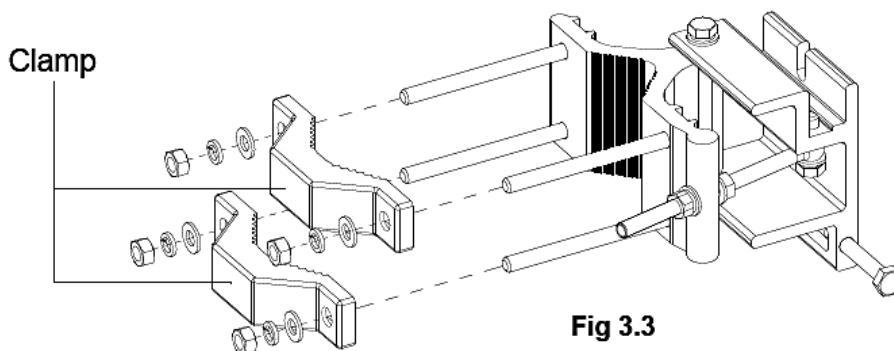
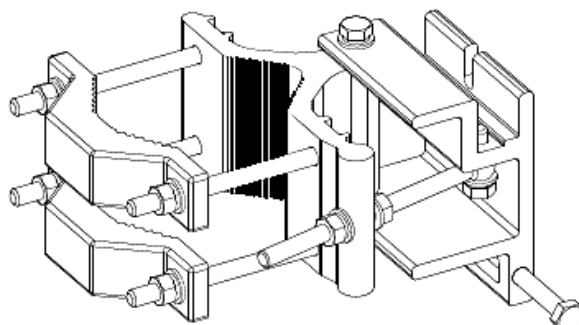


Fig 3.3

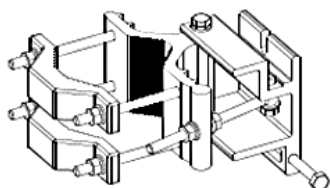
**Step4:** Finishing the entire bracket assembly as shown in Fig 3.4.



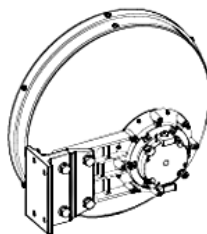
**Fig 3.4**

**3.2 Connect Hanging Bracket and Antenna**

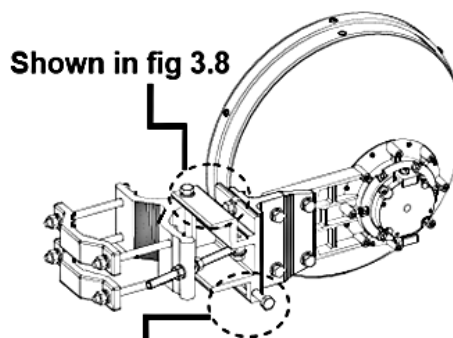
As shown in the diagrams below, connect the mounted Hanging Bracket of Fig 3.5 and Reflector Assembly of 3.6 by bolts (shown in Fig 3.7).



**Fig 3.5**  
**Mounted Hanging Bracket**

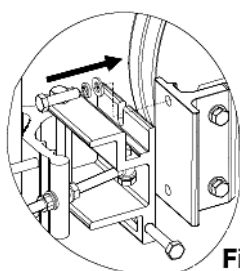


**Fig 3.6**  
**Reflector Assembly**

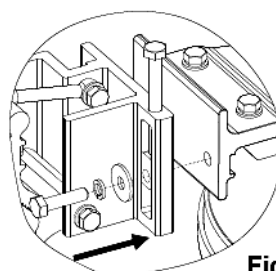


**Fig 3.7**

Use bolt to connect Hanging Bracket and Reflector Assembly in the arrow's direction (shown in Fig 3.8 and Fig3.9).



**Fig 3.8**

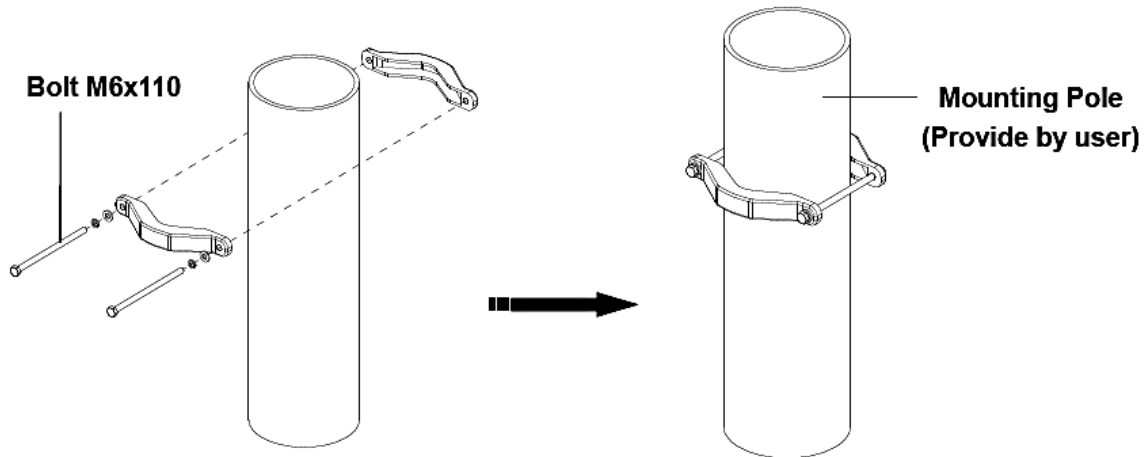


**Fig 3.9**

**4. Antenna Overall Assembly**

**4.1 Mount Anti-slide Bracket**

Anti-slide Bracket could be mounted to the Mounting Pole(ø50~ ø114) in a way shown in Fig 4.1. Make sure tighten the two M6x110 bolts after fixing the position.

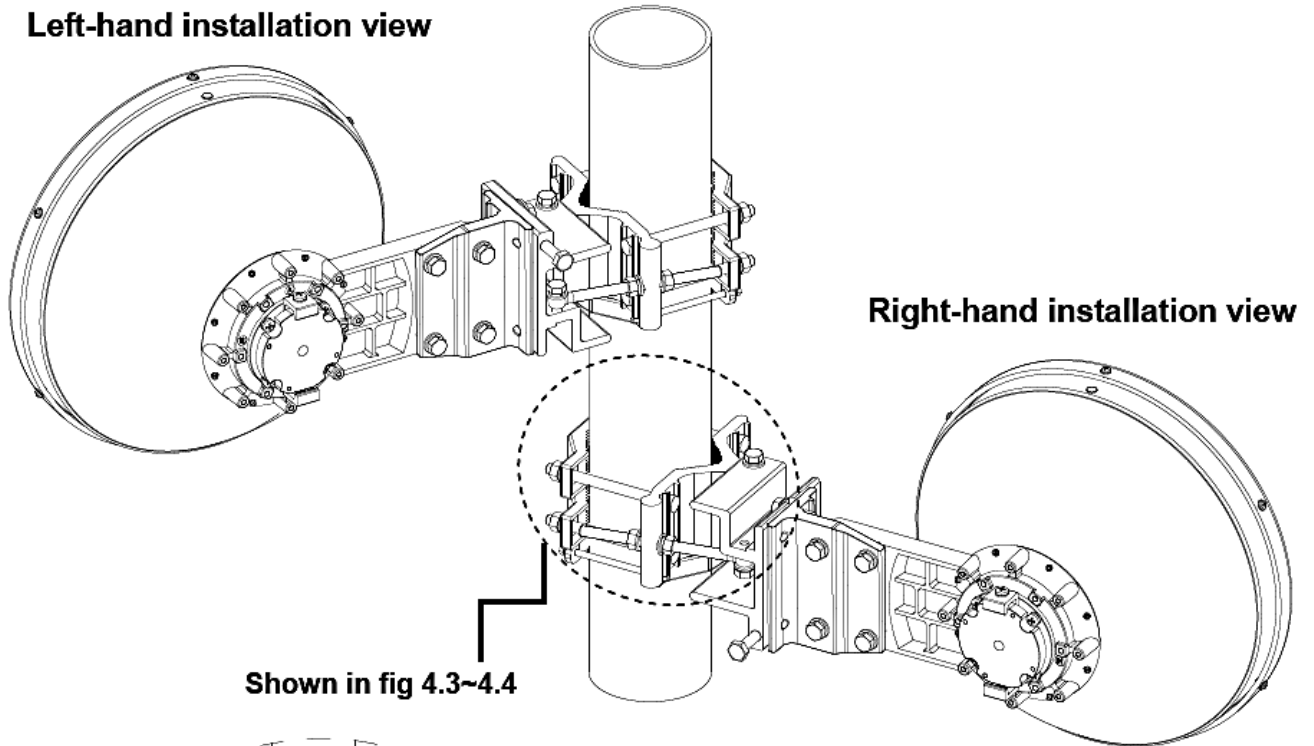


**Fig 4.1**

#### **4.2 Antenna installation**

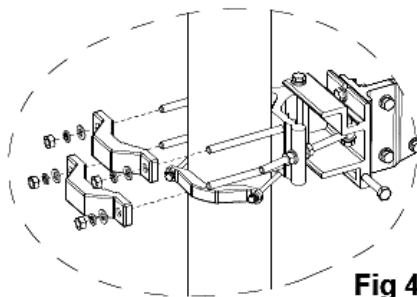
Following indications in Fig. 4.2 ~ 4.3, customer could install the antenna either on the left hand or right hand sides of the pole. After installation, make sure open the bottom draining-hole.

**Left-hand installation view**



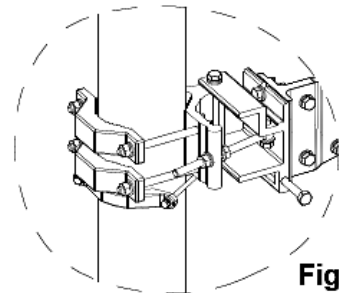
**Right-hand installation view**

Shown in fig 4.3~4.4



**Fig 4.3**

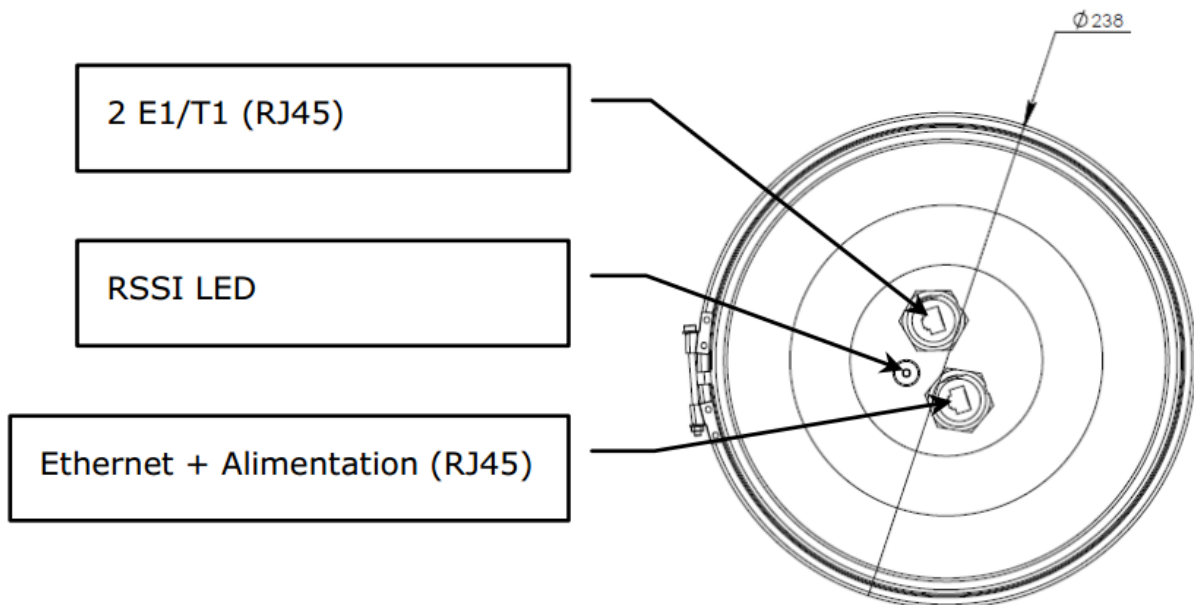
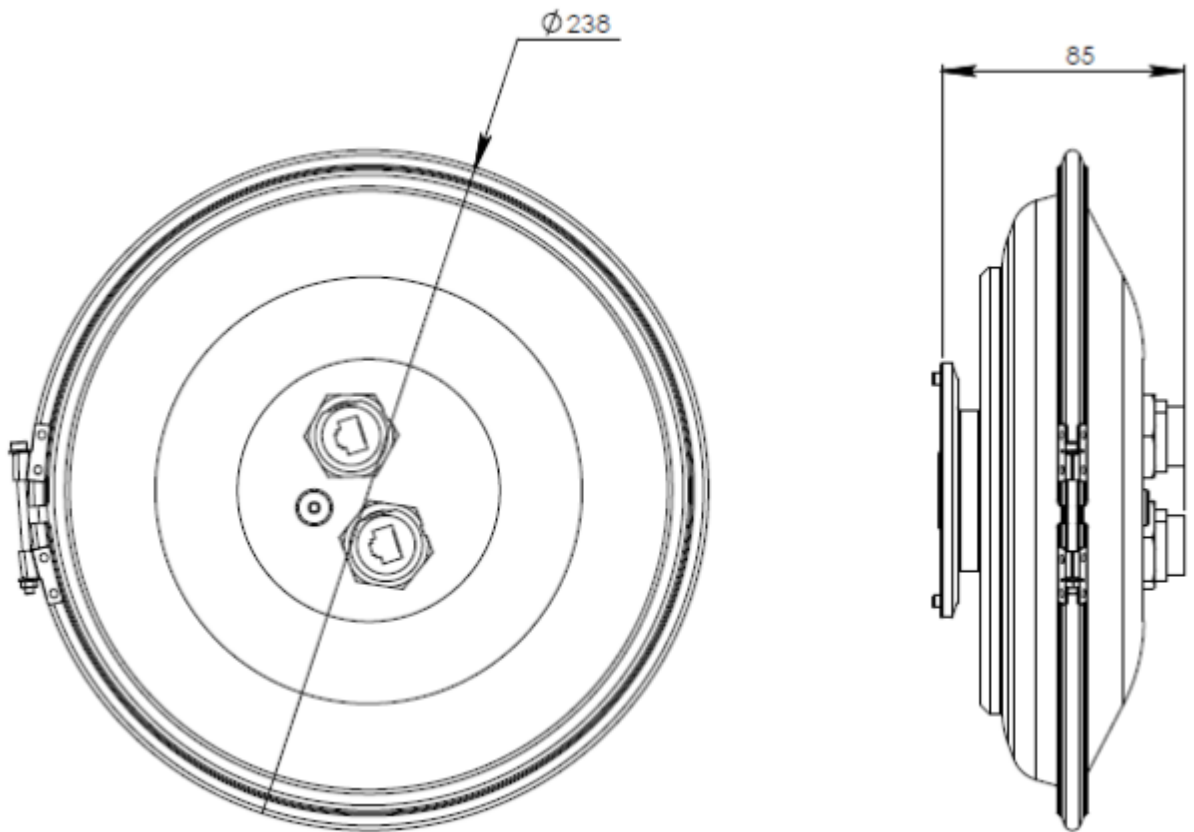
**Fig 4.2**



**Fig 4.4**

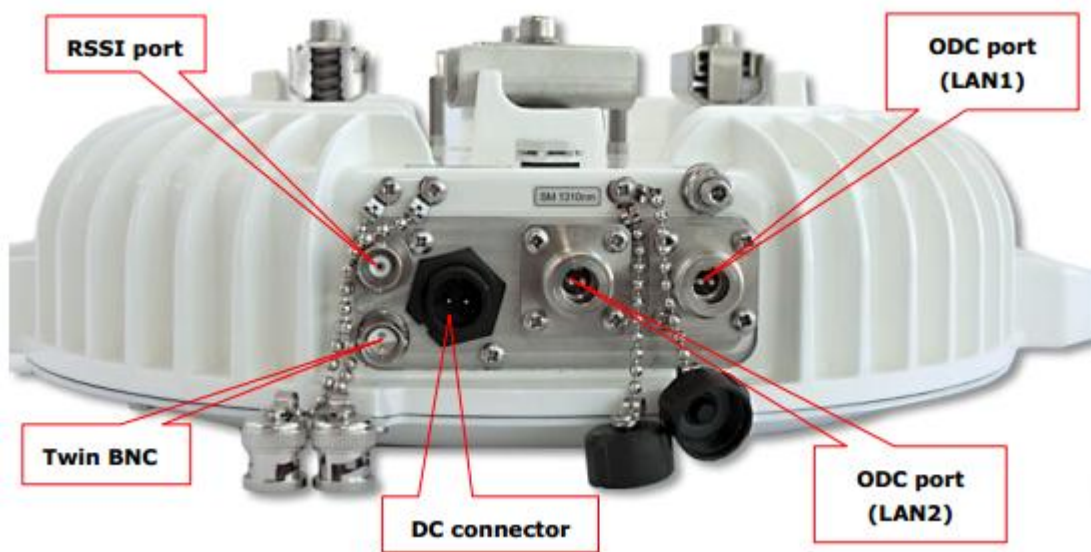
Antenna gets attached to the pole by clamps after tighten all bolts, as shown in Fig 4.3 and Fig4.4.

### 4.3 ODU radio Outdoor units



*Wi200 Hyperbridge ODU*





*Wi700 Hyperbridge ODU*

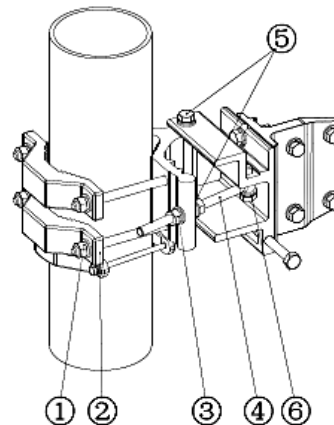


## 5. Antenna Adjustment

### 5.1 Azimuth Adjustment

Make coarse azimuth adjustment in the following way (shown in Fig 5.1): loosen the 4 nuts (No.1) of the Clamp (No.2) properly, and then push the whole structure slowly to make a rotation from 0° to 360° around the Mounting Pole. Use compass to determine the antenna's position if necessary, and then tighten the nuts (No.1).

Make fine azimuth adjustment in the following way: loosen bolts (No. 5 and 6), and then adjust nuts (No.3) of Azimuth Adjustor back and forth slowly. Antenna can make fine azimuth adjustment from -15° to +15°; tighten all the standard parts after the adjustment is done.

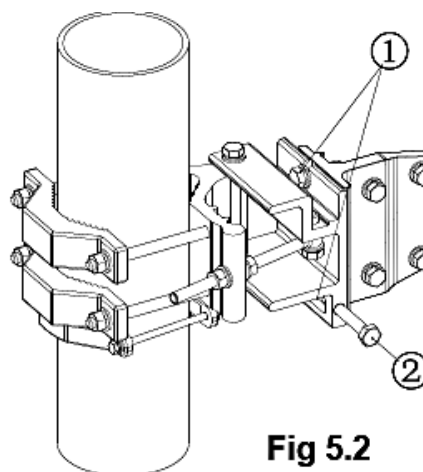


**Fig 5.1**

①③Nut M10    ②Clamp (2 pcs)    ④Azimuth Adjustor    ⑤⑥Bolt M10

### 5.2 Elevation Adjustment

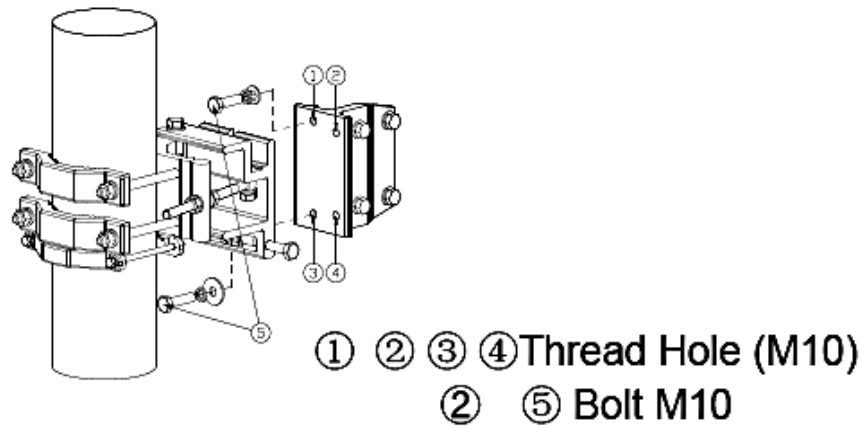
Make elevation adjustment (shown in Fig 5.2): loosen the nuts (No.1), and then rotate Elevation Adjustor clockwise or counterclockwise. Antenna can make fine elevation adjustment from -15° to +15°, tighten all the standard parts after the adjustment is done.



**Fig 5.2**

①Bolt M10    ②Elevation Adjustor

Make coarse elevation adjustment (shown in Fig 5.3): loosen the bolts (No.5). Use ① & ④ thread holes, antenna can make elevation adjustment from +5° to +25°. Use ② & ③ thread holes, antenna can make elevation adjustment from -5° to -25°. Tighten all the standard parts after the adjustment is done.

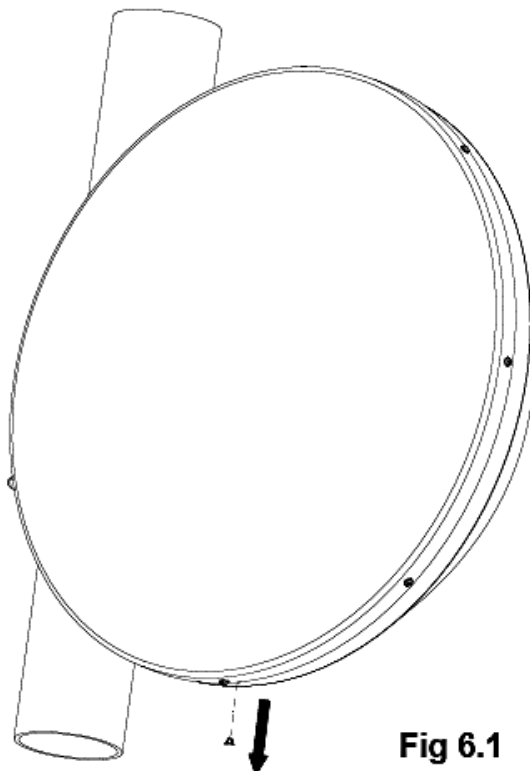


**Fig 5.3**

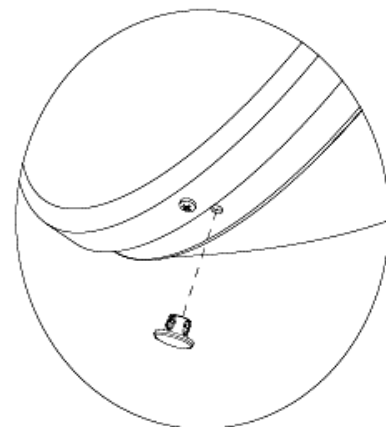
**6. Antenna Assembly Finishing**

6.1 Tighten all the standard parts after antenna assembly are done, regard it to torque of the standard parts is referred to the chapter 1.3.

6.2 Keep the antenna’s bottom draining-hole open. Keep the top one sealed (shown in Fig.6.1 and Fig.6.1.1).

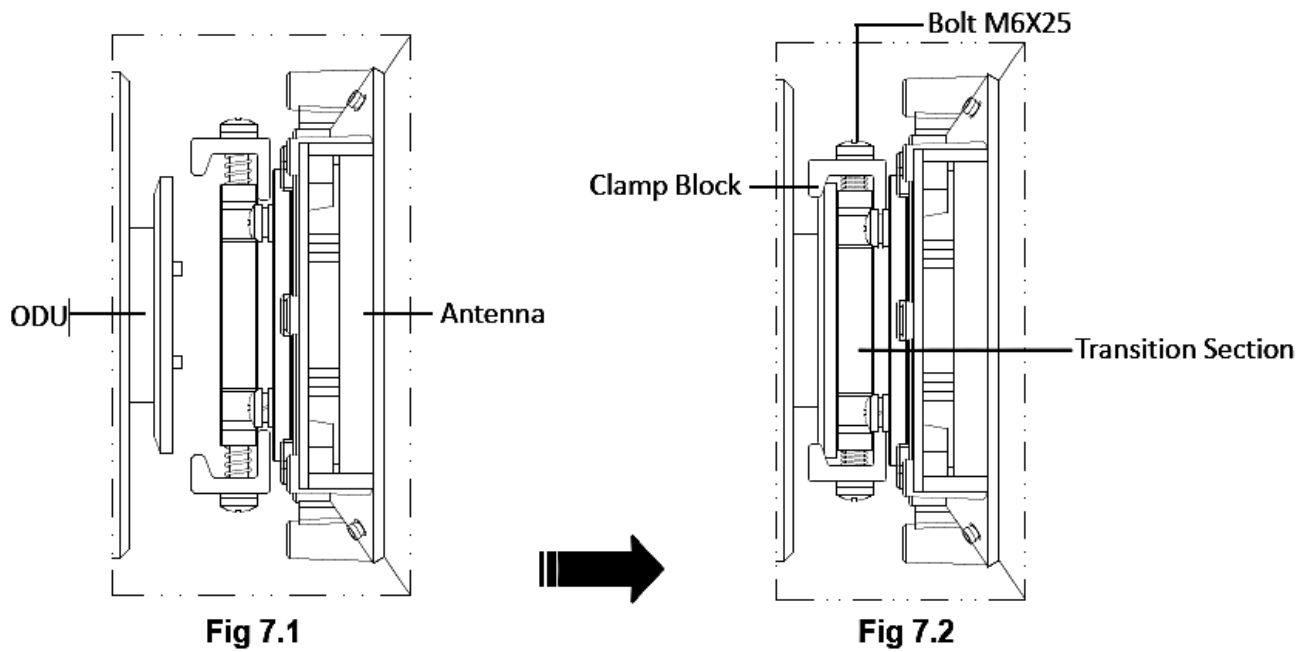


**Fig 6.1**



**Fig 6.1.1**

## 7. Appendix



1. Loosen M6X25 bolts (2PCS), and then put ODU into the Transition Section (shown in Fig 7.1).
2. Tighten all the standard parts (shown in Fig 7.2).