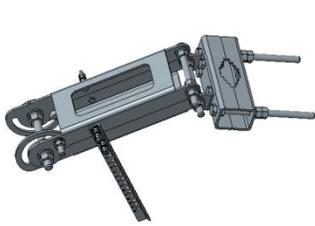


## Clamps 夹具

### 附件清单(Attachment list)

六角螺栓 Bolt GB5783 M16×140	1
六角螺栓 Bolt GB5783 M12×180	4
六角螺栓 Bolt GB5783 M12×130	3
六角螺栓 Bolt GB5783 M10×25	8
大半圆头方颈螺栓 Bolt GB14-88 M10×35	2
螺母 Nut GB41-86 M16	3
螺母 Nut GB41-86 M12	21
螺母 Nut GB41-86 M10	10
外六角螺母 Nut GB6170-86 M6	16
外六角螺丝 Screw GB5782-86 M6×40	4
平垫圈 Flat washer GB95-85 16	3
弹簧垫圈 Spring washer GB93-87 16	3
平垫圈 Flat washer GB95-85 12	13
弹簧垫圈 Spring washer GB93-87 12	13
平垫圈 Flat washer GB95-85 10	10
弹簧垫圈 Spring washer GB93-87 10	10
平垫圈 Flat washer GB95-85 6	8
弹簧垫圈 Spring washer GB93-87 6	8
夹槽板 Clamping plate HC/T-053604	4
支臂 Arm HC/T-053605A	2
支座 Support HC/T-053603A	1
高支座 Support HC/T-053602	1
刻度条/Q235	1

Appearance of the actual antenna may differ from the pictures. — 请以实物为准。



Upper bracket  
上支架组件



Lower bracket  
下支架组件

## Installation Tools 安装工具

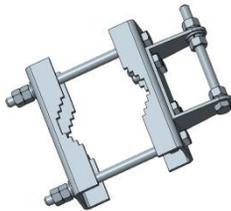
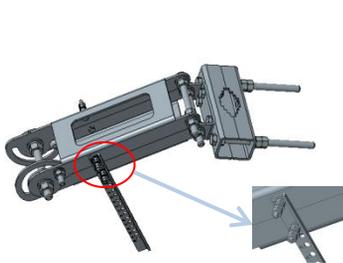


24 mm combination wrench(2PCS)  
18 mm combination wrench(2PCS)  
16 mm combination wrench(2PCS)  
10 mm combination wrench(2PCS)  
两用扳手



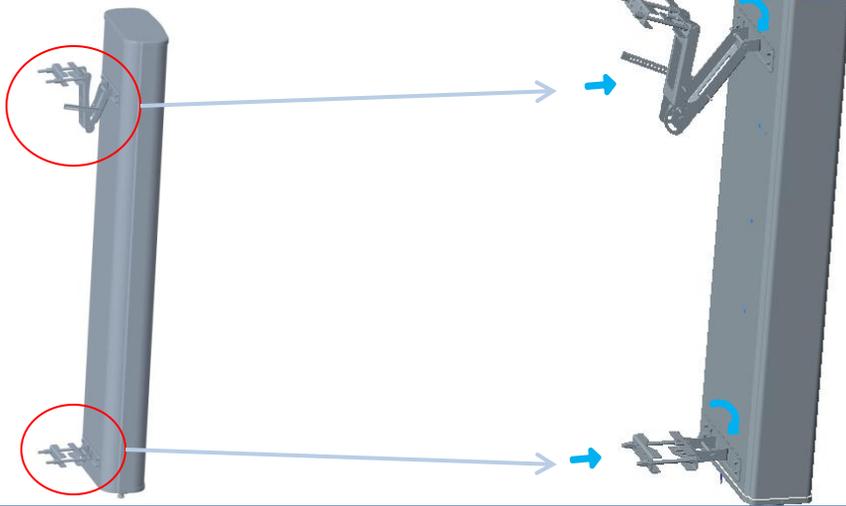
Inclinometer 倾角仪

### Step 1: Assemble the bracket 第一步：组装支架



Follow the directions shown in the picture to install brackets.  
请按图中所示安装好上支架、下支架。

### Step 2: Install the bracket 第二步：安装支架



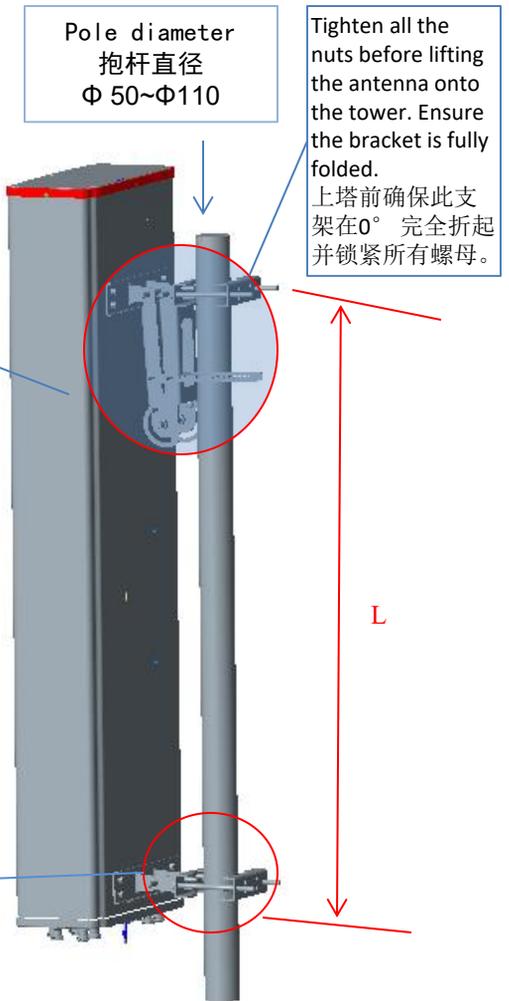
Follow the directions shown in the picture to install brackets.  
请按图中所示将上支架、下支架安装到天线。

Step 3: Install the antenna

第三步：安装天线

Pole diameter  
抱杆直径  
Φ 50~Φ110

Tighten all the nuts before lifting the antenna onto the tower. Ensure the bracket is fully folded.  
上塔前确保此支架在0° 完全折起并锁紧所有螺母。



Install the Antenna on the pole as shown in the figure. The same installation method applies to both upper and lower brackets.  
按图所示安装天线在抱杆上，上支架和下支架安装方式相同。Check and tighten all the nuts when the installation is complete. The operating torques are given in the following figures. 安装完后，要检查并拧紧所有螺母。  
The recommended  
螺栓参考力矩：  
M6=9 N·m; M10=36 N·m; M12=62 N·m; M16=154 N·m



Step 4: Adjust the mechanical downtilt angle

第四步：调节天线的机械下倾角



Method 1  
方法1

Precise reference  
参考测量  
Scale of bracket  
(the actual scale prevails)  
支架刻度尺（实际刻度请以实物为准）



Method 2  
方法2

Precise measurement  
精确测量  
Before adjustment, adjust the inclinometer to the desired downtilt angle. After adjustment, locate the bead in the middle of the inclinometer.  
调节前，将倾角仪调到所需的下倾角度。调节后，倾角仪的水珠水平居中。

17S180	
Mounting plate distance 安装板距离 L(mm)	Down tilt angle 下倾角调节范围
1200 ± 5	0-15°
1600 ± 5	0-12°
After the adjustment is complete, tighten all the nuts. 角度调整完成后，拧紧所有螺母。 Only qualified personnel are allowed to install the antenna. 天线的安装需由合格的安装人员操作。	