

# Amphenol Antenna Solutions



**APM50-H2 MOUNTING KIT  
INSTALLATION INSTRUCTIONS**

REV. 3.0 | 2023.09

# Mounting Instructions for APM50-H2 Kit

---

## SUMMARY

|   |   |
|---|---|
| 1. Applications.....                                    | 3 |
| 2. Mechanical Specifications .....                      | 3 |
| 3. Assembly and Installation .....                      | 3 |
| 4. Installation Tools .....                             | 3 |
| 5. Brackets .....                                       | 4 |
| 6. Installation Without U-shaped Connecting Plate ..... | 4 |
| 7. Installation Without Downtilt kit .....              | 4 |
| 8. Installation With Downtilt Kit .....                 | 5 |
| 9. Antenna Mechanical Downtilt Range.....               | 7 |

# Mounting Instructions for APM50-H2 Kit

## 1. APPLICATIONS

The APM50 kits are mounting hardware options to be used for Base Station antennas.

## 2. MECHANICAL SPECIFICATIONS





- Pole Diameter: 50-125 mm
- Material: Q235, Hot-Dip Galvanized
- Weight: 5.5 kg

## 3. ASSEMBLY AND INSTALLATION

Please read this manual before installation.

1. Only qualified personnel are allowed to install the antenna.
2. Before the installation, check whether the brackets are complete. The bracket consists of down tilt kit and the clamps, wherein down tilt kit is arranged in the lining block of the packing box, and the clamps is arranged under the antenna inside the packing box.
3. The appearance of the antennas shown in the figures is only for reference and may differ from the actual one.
4. Before the installation, check the appearance of the brackets according to this guide. The installation methods vary with the component appearance. The installation procedures described in this guide must be strictly followed.
5. The antenna can be equipped with the down tilt kit or without the down tilt kit. Select an installation mode based on site conditions.
6. The protection caps of antenna ports not connecting to jumpers must not be removed. Meanwhile, waterproof measures must be taken to protect these antenna ports.

## 4. INSTALLATION TOOLS


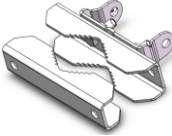
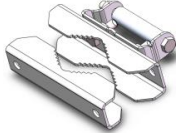
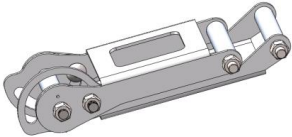
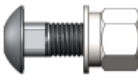

|  |   |
|--|---|
| <p><b>Inclinometer</b></p>                    | <p><b>Torque wrench</b></p>                   |
| <p><b>17mm combination wrench (2pcs)</b></p>  | <p><b>19mm combination wrench (2pcs)</b></p>  |

### MAXIMUM TORQUE

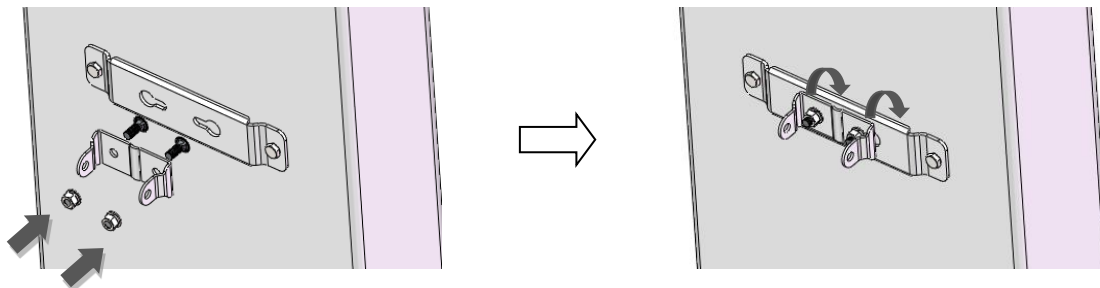
|            |       |
|------------|-------|
| <b>M10</b> | 40 Nm |
| <b>M12</b> | 75 Nm |

## Mounting Instructions for APM50-H2 Kit

### 5. BRACKETS

|                            |   |  |   |
|----------------------------|---|--|---|
| <p><b>Clamps</b></p>       | <br>M10 (4pcs) | <br>(1pcs)  | <br>(1pcs) |
| <p><b>Downtilt kit</b></p> | <br>(1pcs)     | <br>(4pcs) | <br>(2pcs) |

### 6. INSTALLATION WITHOUT U-SHAPED CONNECTING PLATE

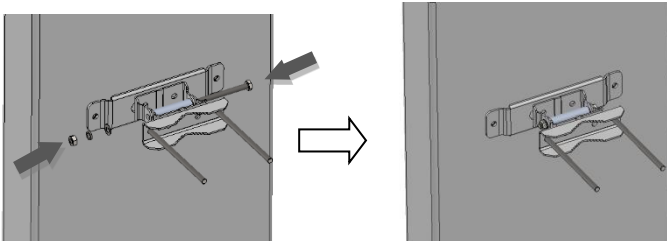
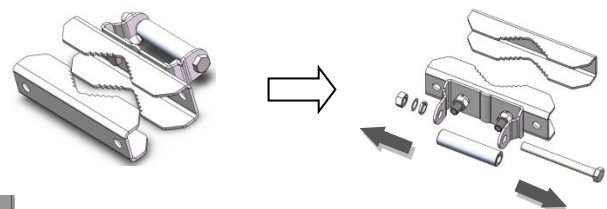


The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

### 7. INSTALLATION WITHOUT DOWNTILT KIT

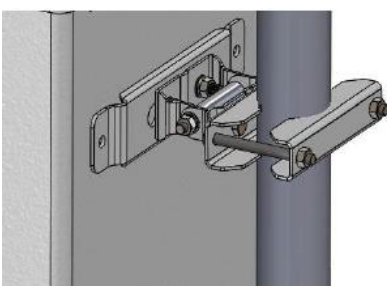
1. Disassemble the clamps (1 or 2pcs).

2. Install the clamps.



The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

3. Install the antenna.



a. The mechanical downtilt of the antenna is fixed to 0° and cannot be adjusted.

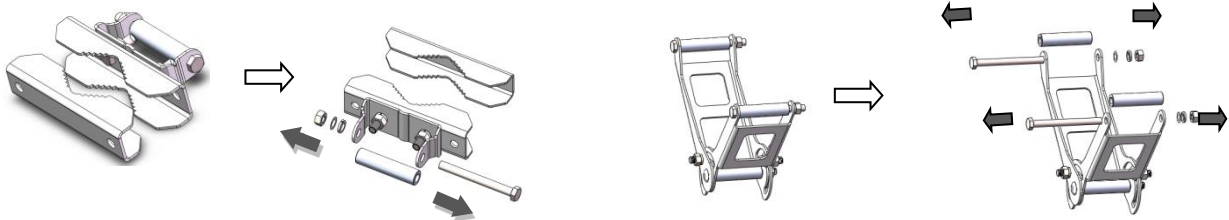
b. The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

c. Check and tighten all the nuts when the installation is complete.

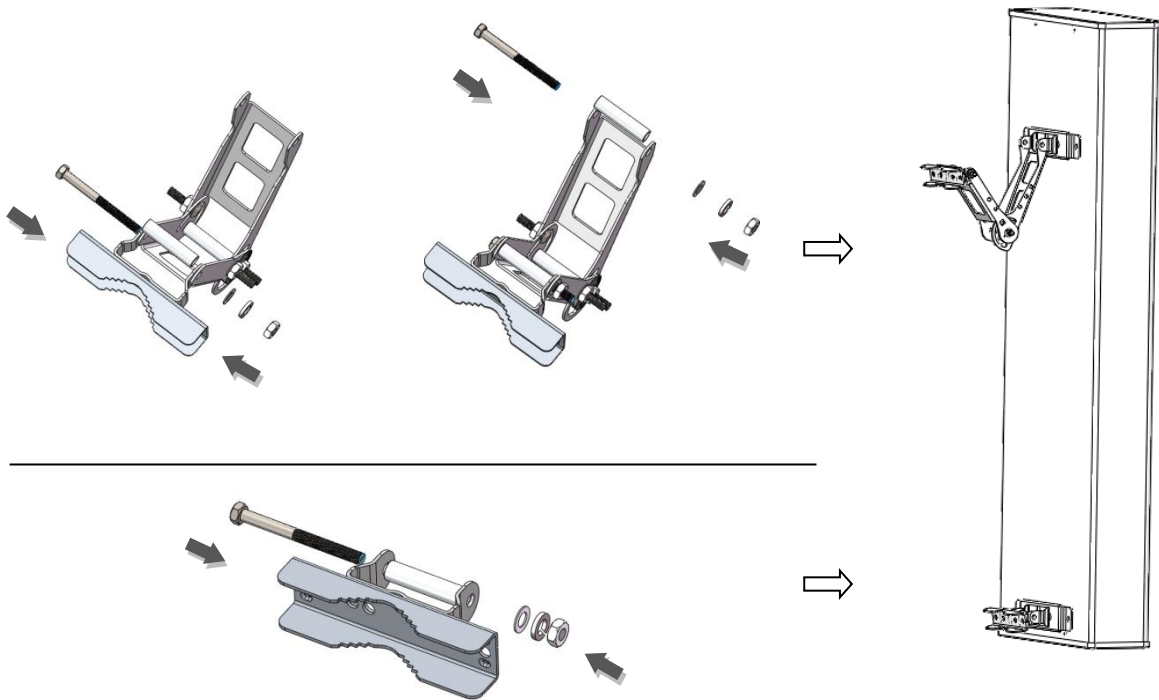
# Mounting Instructions for APM50-H2 Kit

## 8. INSTALLATION WITH DOWNTILT KIT

1. Disassemble the brackets.

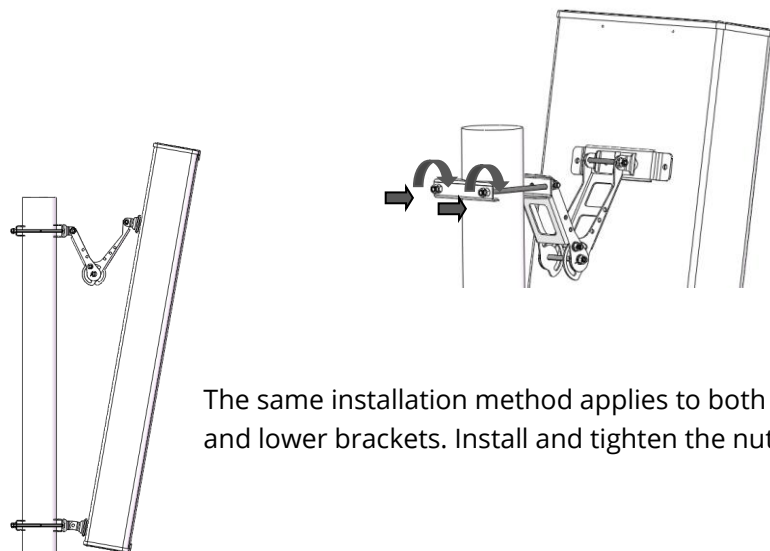


2. Install the brackets.



3. Install the antenna.

Tighten all the nuts before lifting the antenna onto the tower. Ensure the bracket is fully folded.



The same installation method applies to both upper and lower brackets. Install and tighten the nuts.

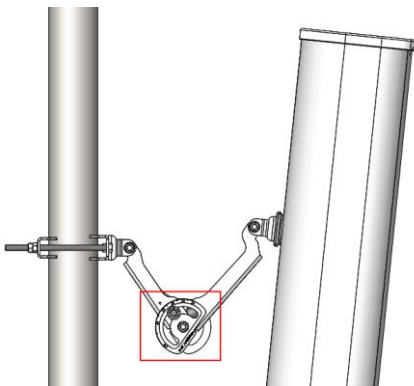
## Mounting Instructions for APM50-H2 Kit

### 4. Adjust the mechanical downtilt.

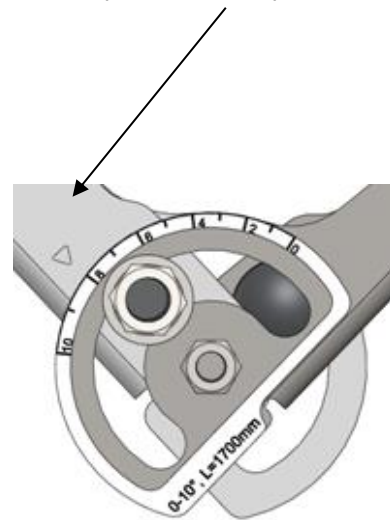
Method 1: Use a scale plate.

Method 1 is used to roughly adjust the mechanical tilt. The reading is only for reference.

Scale plate

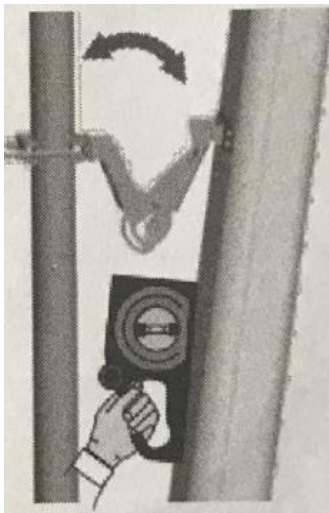


Example of a scale plate (8°)

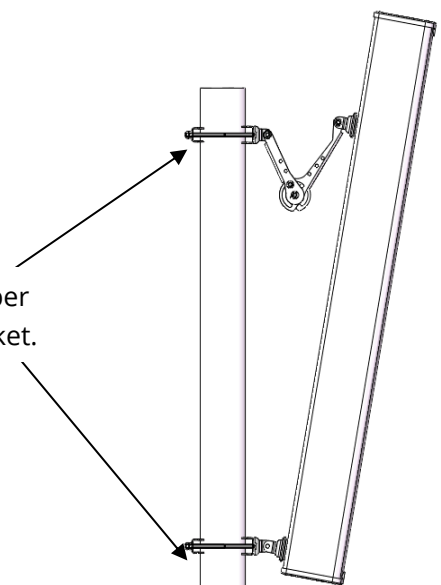


Method 2: Use an inclinometer.

Method 2 is used to precisely adjust the mechanical tilt.



Tighten the upper and lower bracket.



## Mounting Instructions for APM50-H2 Kit

---

### 9. ANTENNA MECHANICAL DOWNTILT RANGE

| Antenna Length (mm)  | Mechanical Downtilt Range (°) |
|----------------------|-------------------------------|
| $L \geq 2600$        | 0-8                           |
| $2200 \leq L < 2600$ | 0-10                          |
| $1800 \leq L < 2200$ | 0-12                          |
| $1000 \leq L < 1800$ | 0-16                          |
| $600 \leq L < 1000$  | 0-20                          |
| $L < 600$            | 0-30                          |

## Mounting Instructions for APM50-H2 Kit

---

---

### **NAR**

Conover & Meriden  
+1 (779) 970-1605  
Technical Support  
[support@amphenol-antennas.com](mailto:support@amphenol-antennas.com)

### **APAC**

Shanghai  
+86 (21) 3773 8888  
Technical Support  
[apac.bsa.support@amphenol-antennas.com](mailto:apac.bsa.support@amphenol-antennas.com)

### **EMEA & LATAM**

Amboise & Lannion  
Technical Support  
[techsupport@amphenol-antennas.com](mailto:techsupport@amphenol-antennas.com)