

Amphenol Antenna Solutions



**APM50-H1 MOUNTING KIT
INSTALLATION INSTRUCTIONS**

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Mounting Instructions for APM50-H1 Kit

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Mounting Instructions for APM50-H1 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: 4 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


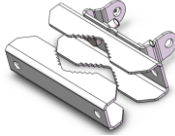
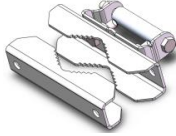
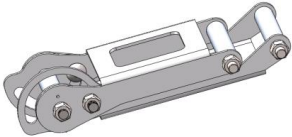
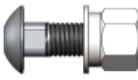

| | | |
|--|---|---|
| <p>Inclinometer</p>  | <p>13mm combination wrench (2pcs)</p>  | <p>Torque wrench</p>  |
| <p>17mm combination wrench (2pcs)</p>  | <p>19mm combination wrench (2pcs)</p>  | |

MAXIMUM TORQUE

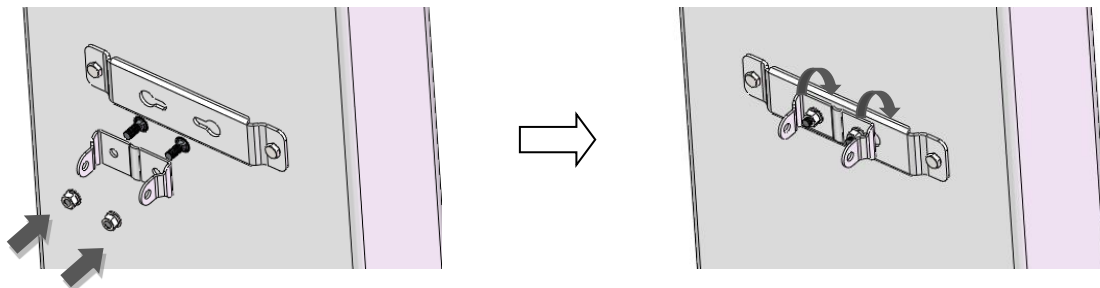
| | |
|------------|-------|
| M8 | 20 Nm |
| M10 | 40 Nm |
| M12 | 75 Nm |

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5. BRACKETS

| | | | |
|---------------------|---|--|---|
| Clamps |  M10 (4pcs) |  (1pcs) |  (1pcs) |
| Downtilt kit |  (1pcs) |  (4pcs) |  (2pcs) |

6. INSTALLATION WITHOUT U-SHAPED CONNECTING PLATE

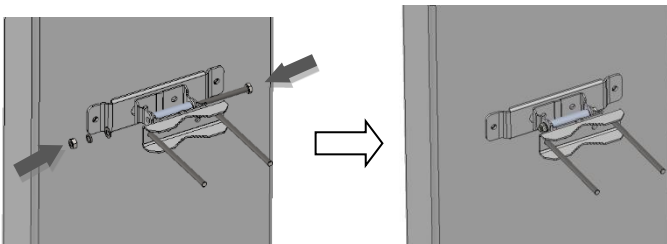
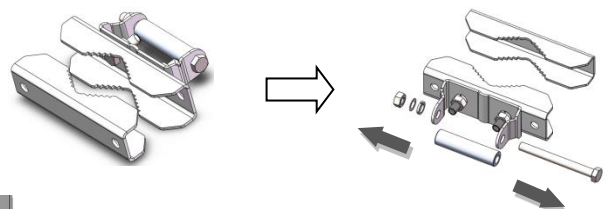


The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

7. INSTALLATION WITHOUT DOWNTILT KIT

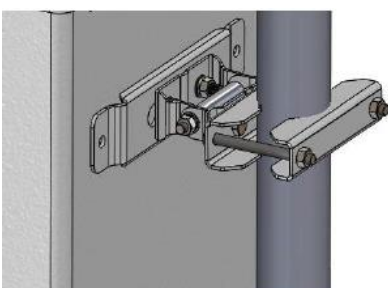
1. Disassemble the clamps (1 or 2pcs).

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.

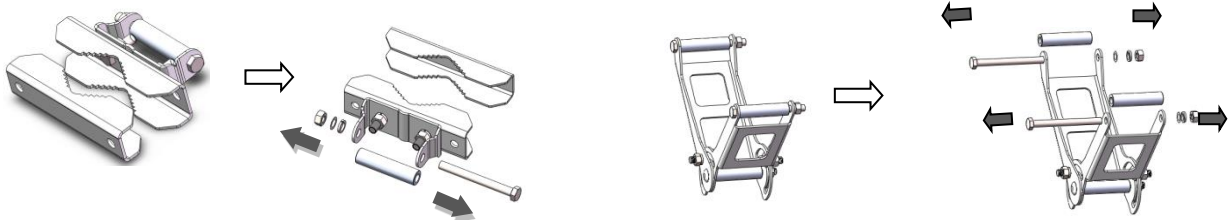
b. The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

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

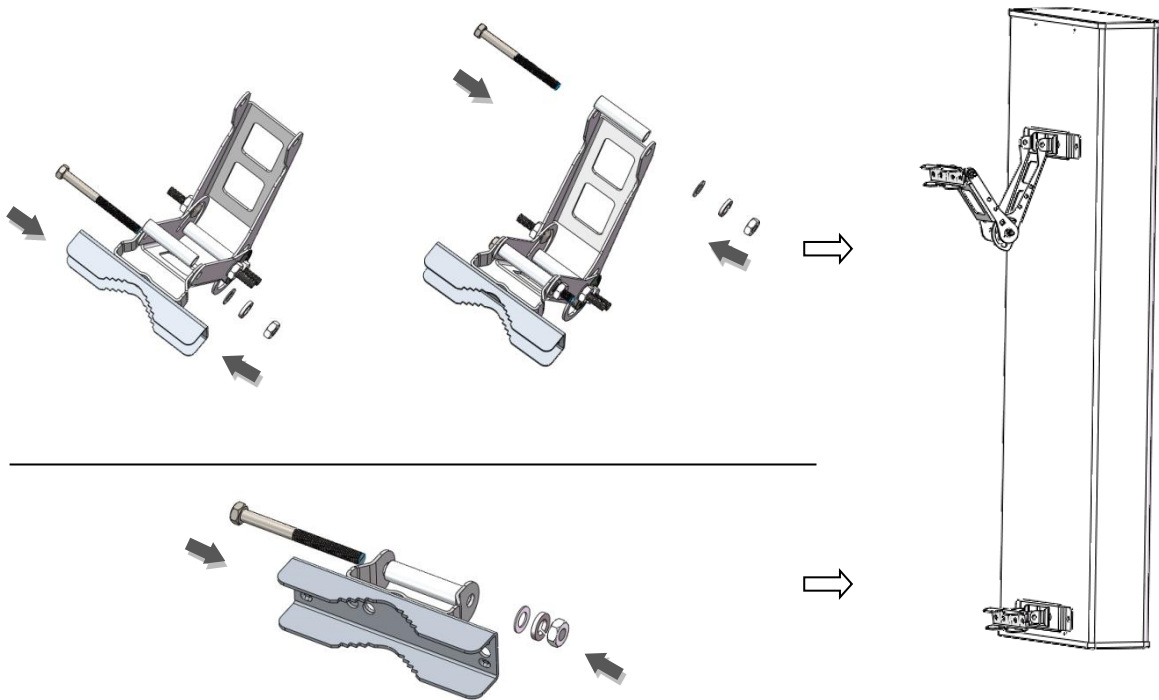
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8. INSTALLATION WITH DOWNTILT KIT

1. Disassemble the brackets.

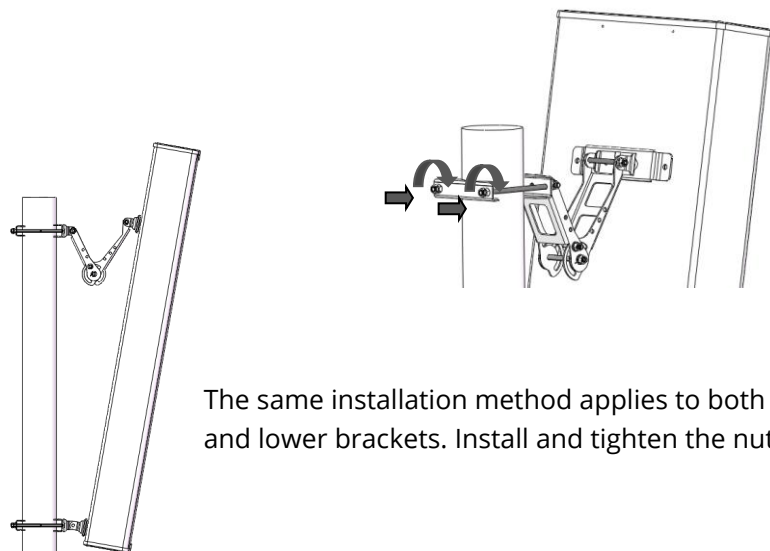


2. Install the brackets.



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.

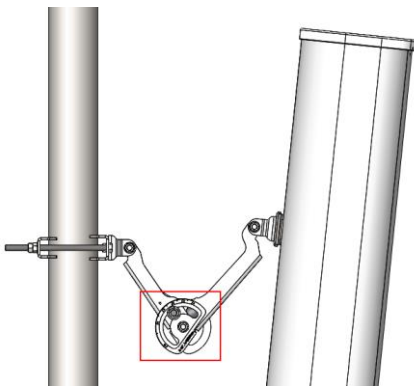
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4. Adjust the mechanical downtilt.

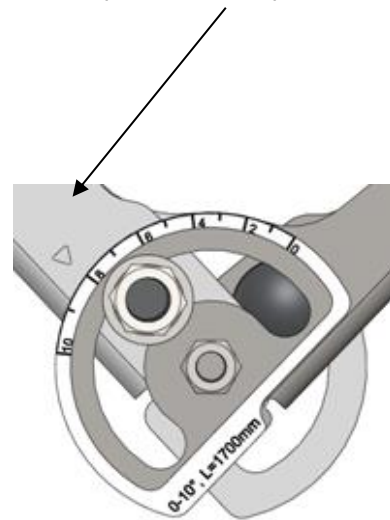
Method 1: Use a scale plate.

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

Scale plate



Example of a scale plate (8°)

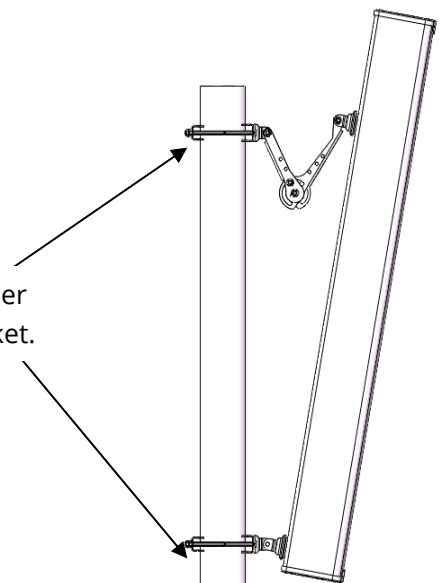


Method 2: Use an inclinometer.

Method 2 is used to precisely adjust the mechanical tilt.



Tighten the upper
and lower bracket.



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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 |

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