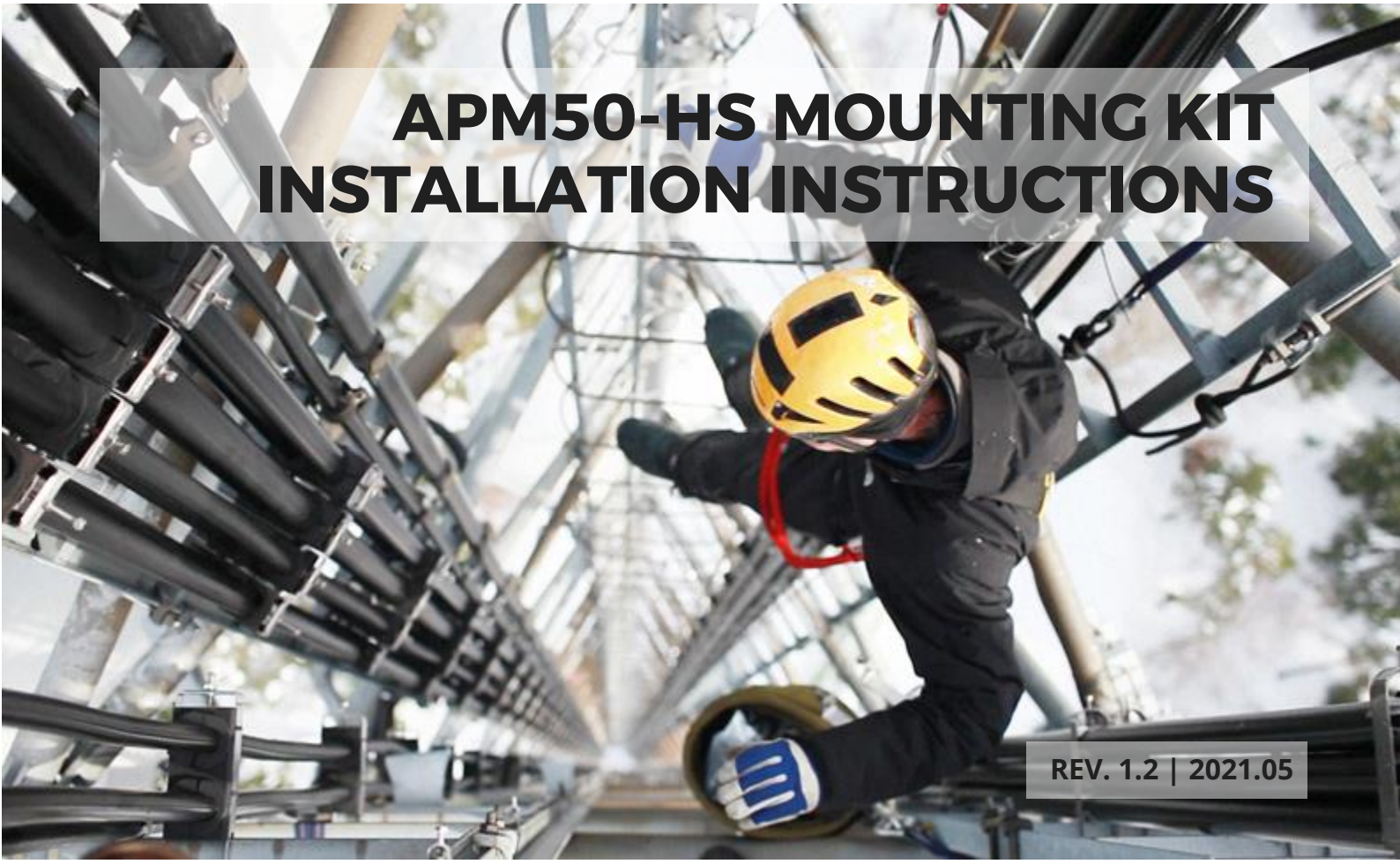
Radio Frequency Systems



APM50-HS MOUNTING KIT INSTALLATION INSTRUCTIONS

REV. 1.2 | 2021.05

10000025367 | Revision 1.2 | May 2021 |

Mounting Instructions for APM50-HS Kit

SUMMARY

Mounting Instructions for APM50-HS 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: 9 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

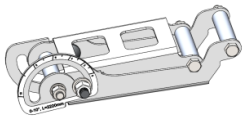
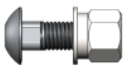
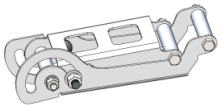
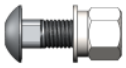
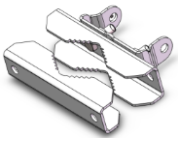
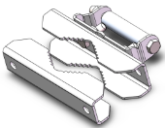
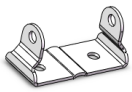
Inclinometer 	**Torque wrench** 
17mm（2pcs） **17mm combination wrench（2pcs）** 	**19mm（2pcs）** **19mm combination wrench（2pcs）** 

MAXIMUM TORQUE

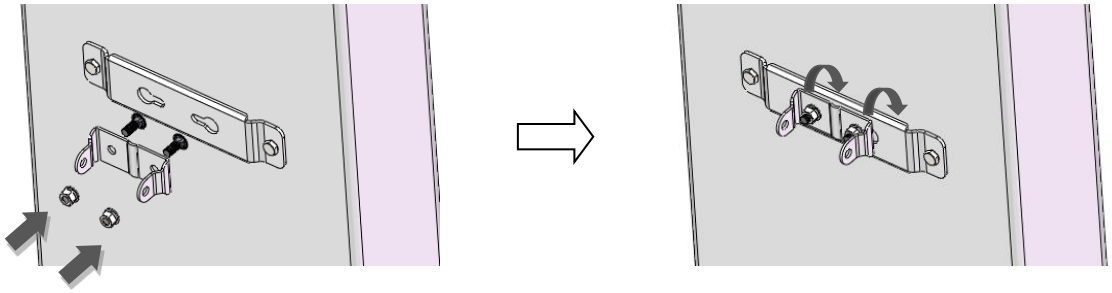
M10	40 Nm
M12	75 Nm

Mounting Instructions for APM50-HS Kit

5. BRACKETS

S-A (Top)	 (1pcs)	 M10 (3pcs)	 M10 (3pcs)
S-B (Middle)	 (1pcs)	 M10 (3pcs)	 M10 (3pcs)
S-C (Bottom)	 (2pcs)	 (1pcs)	 (3pcs)

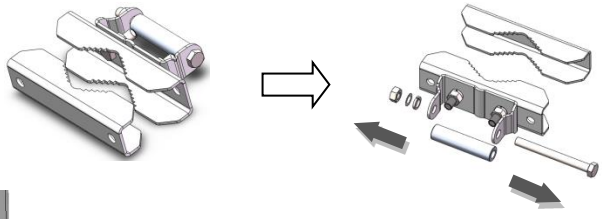
6. INSTALLATION WITHOUT U-SHAPED CONNECTING PLATE



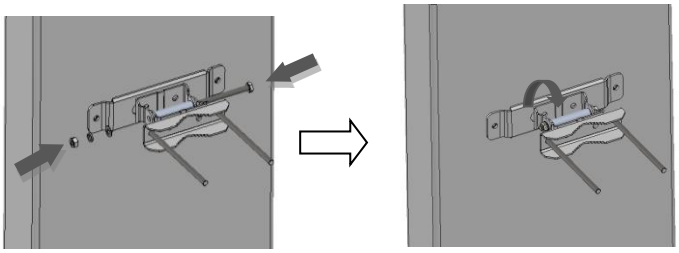
The same installation method applies to both upper and lower clamps. Install and tighten the nuts.

7. INSTALLATION WITHOUT DOWNTILT KIT

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



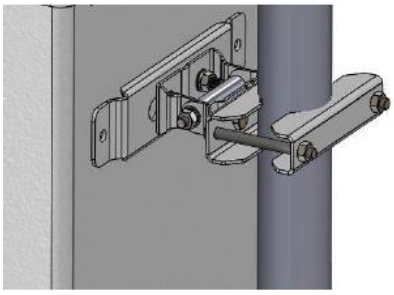
2. Install the clamps.



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

Mounting Instructions for APM50-HS Kit

3. Install the antenna.



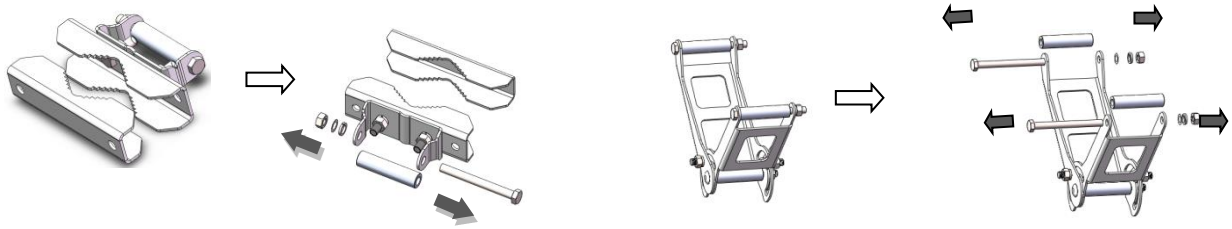
a. The mechanical downtilt of the antenna is fixed to 0° and cannot be adjusted.

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

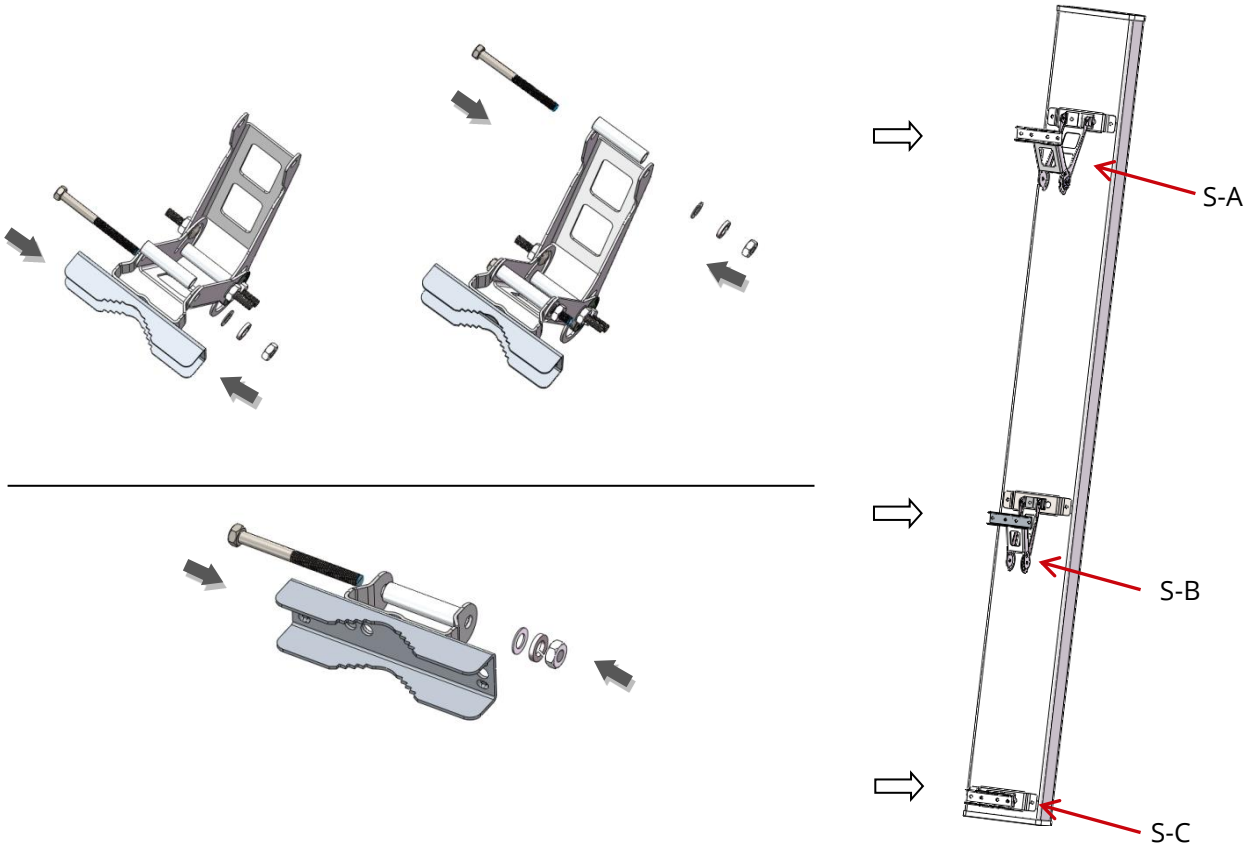
c. Check and tighten all the nuts when the installation is complete.

8. INSTALLATION WITH DOWNTILT KIT

1. Disassemble the brackets.



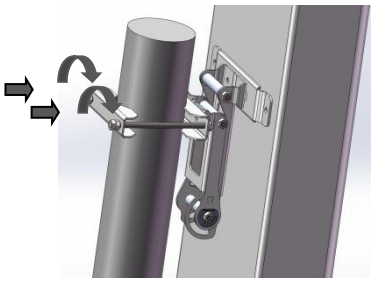
2. Install the brackets.



Mounting Instructions for APM50-HS Kit

3. Install the antenna.

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

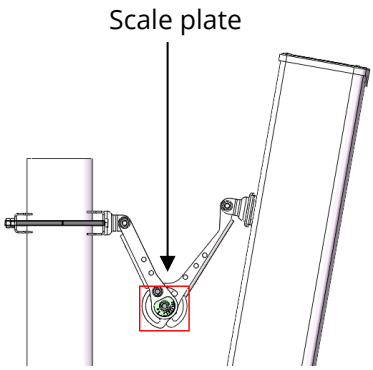


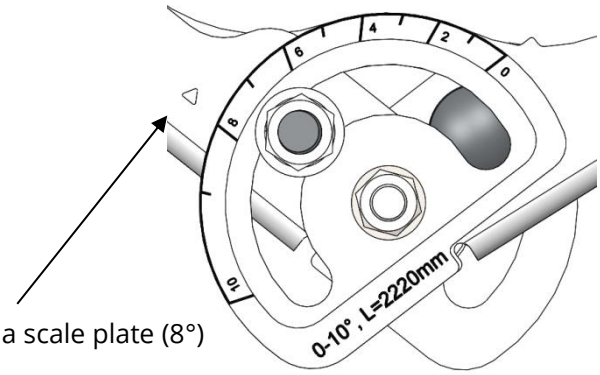
The same installation method applies to both upper and lower brackets. Install and tighten the nuts.

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.

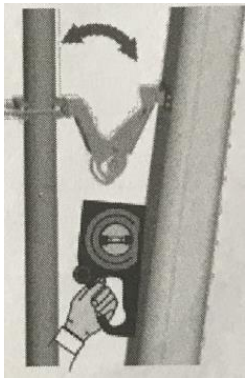


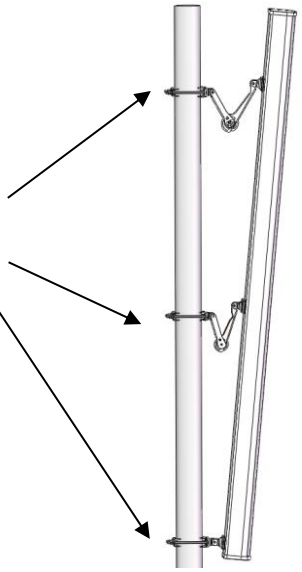


Example of a scale plate (8°)

Method 2：Use an inclinometer.

Method 2 is used to precisely adjust the mechanical tilt.





Mounting Instructions for APM50-HS Kit

9. ANTENNA MECHANICAL DOWNTILT RANGE

Antenna Length (mm)	Mechanical Downtilt Range (°)
L ≥ 2600	0-8
2200 ≤ L < 2600	0-10
1800 ≤ L < 2200	0-12
1000 ≤ L < 1800	0-16
600 ≤ L < 1000	0-20
L < 600	0-30

About RFS

Radio Frequency Systems (RFS) delivers the end-to-end RF solutions and expert services needed to evolve wireless and broadcast networks today and tomorrow. Our cables, connectors, antenna systems and RF conditioning products are based on more than 120 years of experience delivering cutting-edge RF solutions and industry firsts. As a result, our solutions are recognized globally for their innovation, superior performance and unmatched quality.

As an ISO-compliant company with global operations, we bring our customers world-class engineering and manufacturing skills backed with comprehensive local support services. Our customers know they can rely on our expertise and commitment to excellence from initial design to final delivery and beyond — whether they're looking to support 5G, deploy small cells, empower smart cities or improve indoor coverage in the most challenging locations.

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