



# Radio Frequency Systems



## APM50-B1 MOUNTING KIT INSTALLATION INSTRUCTIONS

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## Mounting Instructions for APM50-B1 Kit

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### SUMMARY

1. Applications.....	3
2. Mechanical Specifications .....	3
3. Assembly and Installation .....	3
Installation Preparation.....	3
Installation Tools .....	3
Installation Instructions.....	4
4. Antenna Mechanical Downtilt Range.....	5
5. Material list.....	6

# Mounting Instructions for APM50-B1 Kit

## 1. APPLICATIONS

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

## 2. MECHANICAL SPECIFICATIONS

- Pole Diameter: 50-110 mm
- Weight: 4.5 kg

## 3. ASSEMBLY AND INSTALLATION

### Installation Preparation

1. Check each package against packing list.
2. Observe safe working at heights.
3. Ensure lightning protection is applied.
4. Annual maintenance is recommended to antenna system.

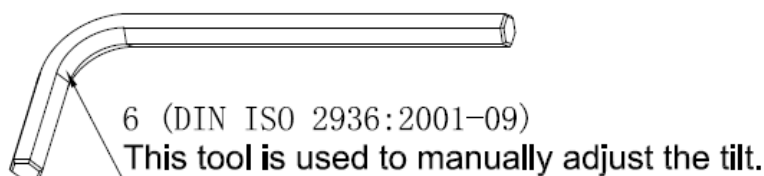
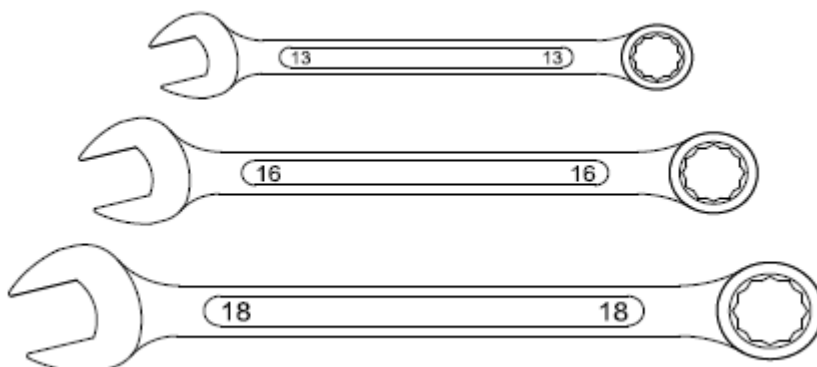
### Installation Tools

#### TIGHTENING NUT TORQUE VALUES

Nut	Wrench	Torque
M8	13(14)mm	18-22Nm
M10	16(17)mm	32-40Nm
M12	18(19)mm	57-75Nm

#### TIGHTENING CONNECTOR TORQUE VALUES

Connector	Wrench
4.3-10	5-8Nm
7-16	18-22Nm

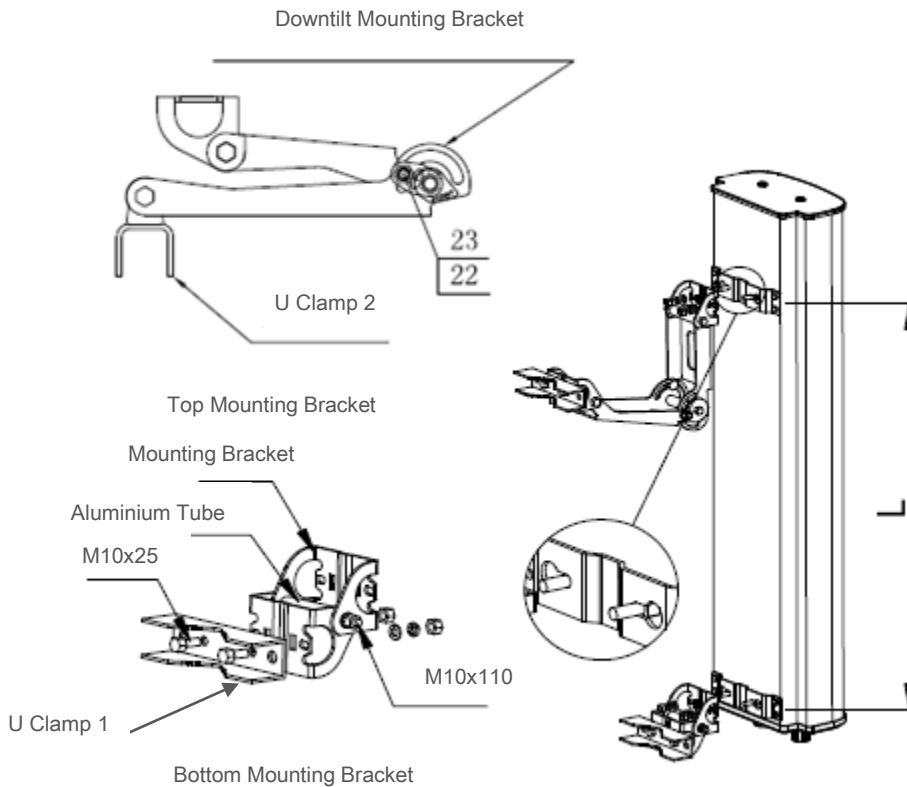


## Mounting Instructions for APM50-B1 Kit

### Installation Instructions

#### Step 1

Pre-assemble the top and bottom mounting brackets. Tighten the U Clamp with M8 bolts (torque 18Nm).

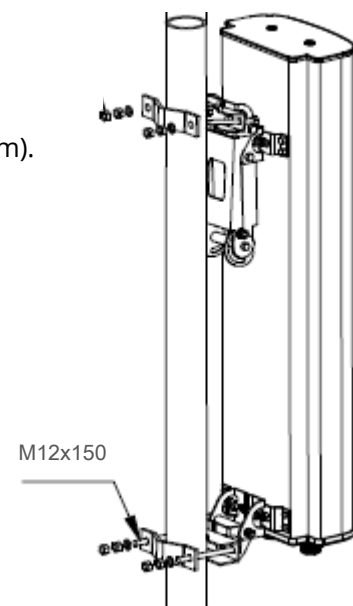


#### Step 2

Assemble mounting brackets to the antenna with four M8 bolts (torque 18Nm).

#### Step 3

1. Adjust tilt to 0° and tighten nut A;
2. Fasten antenna to pole vertically with M12x150 bolts (torque 57Nm).



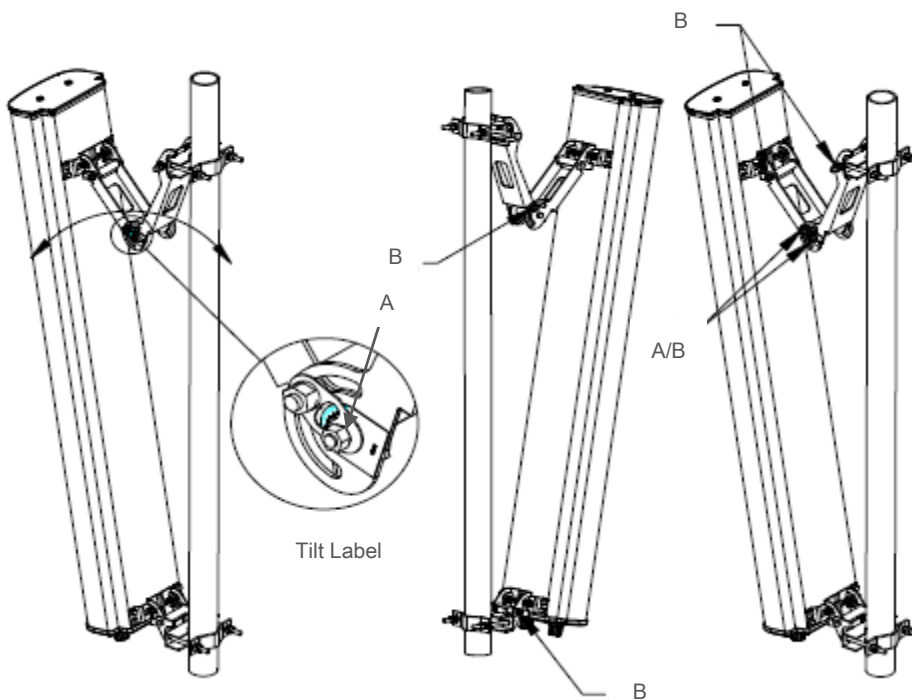
## Mounting Instructions for APM50-B1 Kit

### Step 4

Loose nut A and adjust downtilt mounting bracket to achieve required downtilt angle.

### Step 5

Tighten nut A and B to fix antenna downtilt angle (torque 32Nm).



### 4. ANTENNA MECHANICAL DOWNTILT RANGE

Antenna Length (mm)	Mechanical Downtilt Range (°)
2900	0-7
2520	0-8
2100	0-9
1450	0-12
1365	0-13
1250	0-14
1088	0-16
920	0-20
558	0-30



## Mounting Instructions for APM50-B1 Kit

### 5. MATERIAL LIST

ITEM#	DESCRIPTION	STANDARD	QTY	MATERIAL
1	Upper Mounting Bracket		1	Q235A t=4
2	Hex Bolt (M10×110)	GB5783-86	4	35 (Hot Galvanizing)
3	Plain Washer (M10)	GB97.1-85	6	304
4	Spring Washer (M10)	GB93-87	6	304
5	Nut (M10)	GB6170-86	6	35 (Hot Galvanizing)
6	Aluminum Tube		4	L2
7	Tilt		1	304(t=1)
8	Square Neck Bolt (M8)	GB/T12	4	304
9	Spring Washer (M8)	GB93-87	5	304
10	Tilt Washer		1	5052(t=1.5)
11	Lower Mounting Bracket		1	Q235A t=4
12	U Clamp 2		1	Q235A t=4
13	Clamp		2	Q235A t=5
14	Hex Bolt (M12×150)	GB5783-86	4	35 (Hot Galvanizing)
15	Plain Washer (M12)	GB97.1-85	4	304
16	Nut (M12)	GB6170-86	8	35 (Hot Galvanizing)
17	U Clamp 1		1	Q235A t=4
18	Mounting Bracket		3	Q235A t=4
19	Hex Bolt (M10×25)	GB5783-86	2	35 (Hot Galvanizing)
20	Plain Washer (M8)	GB97.1-85	4	304
21	Nut (M8)	GB6170-86	4	304
22	Square Neck Bolt (M8)	GB/T12	1	35 (Hot Galvanizing)
23	Nut (M8)	GB6170-86	1	35 (Hot Galvanizing)

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## 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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