

Amphenol Antenna Solutions



**APM40-E-SBS
INSTALLATION INSTRUCTIONS**

REV. 2 | APR 2024

Mounting Instructions for APM40-E-SBS

SUMMARY

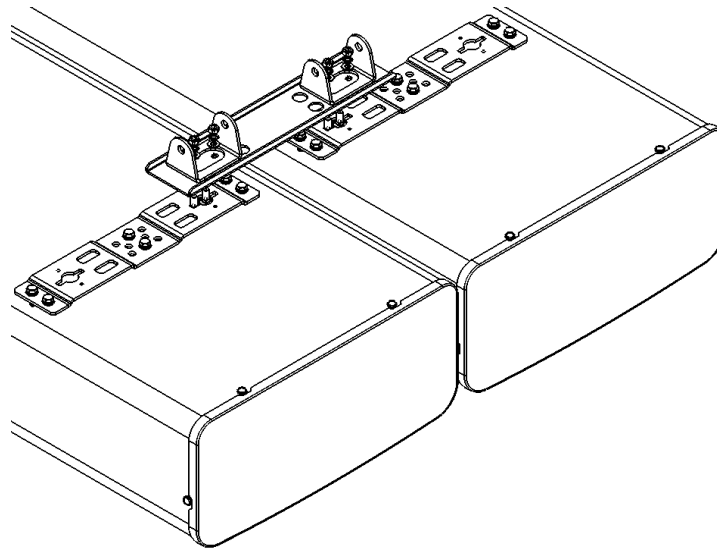
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Mounting Instructions for APM40-E-SBS

1. APPLICATION

The mounting kit is a mounting hardware option to be used for joining two Base Station Antennas side-by-side and mounting to a tower as a single antenna. This kit can be used with the APM40-5E & APM40-1E series and radome width less than 500mm antennas. It is designed to create a central distance 260mm between the two columns.

1. Attach interface bracket to antenna with M8 hardware where required.
2. The installation of Top and Bottom interface are the same.



Antenna mounting kit Type

TOP/BOT SAME

Note: The rated survival speed of 240km/hr is only valid with a direct pipe mounting.

If the antenna was purchased with the APM40-5E mechanical downtilt bracket, some parts will not be used. Please see page 7 for the list of parts that will not be installed with the antenna in the direct pipe, side-by-side configuration.

2. FEATURES

- Kit P/N# 50017243
- Pipe diameter: 60-120mm
- Mechanical downtilt: Fixed tilt 0° for side-by-side antennas.

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3. MECHANICAL SPECIFICATIONS

Weight of Kit (kg)	3.0
Mounting Kit Material	Galvanized steel
Packaging Dimensions, H x W x D (mm)	460 x 210 x 90
Packaging Material	Plastic Sleeve

Please contact technical support for more information.

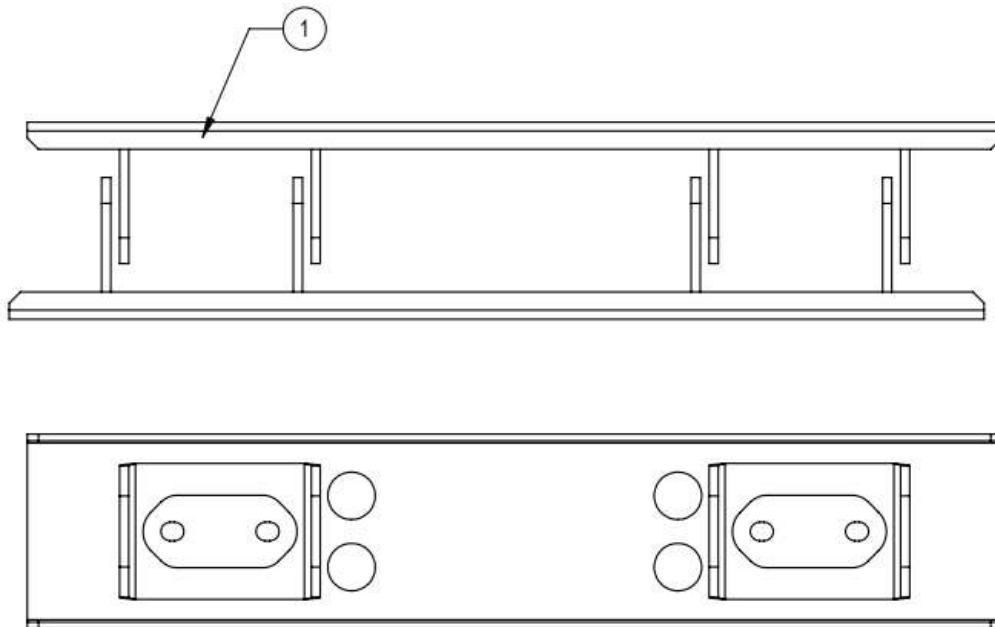
4. TOOLS REQUIRED FOR INSTALLATION

- 13mm, 18mm and 19mm (3/4") AF Spanner or Socket (3/8" drive recommended)
- Torque wrench

5. ITEM NUMBERS FOR THE MOUNT KIT HARDWARE

5.1 Item FOR -APM40-E-SBS

ITEM#	DESCRIPTION	QUANTITY
1	Mounting for APM40-E-SBS	2

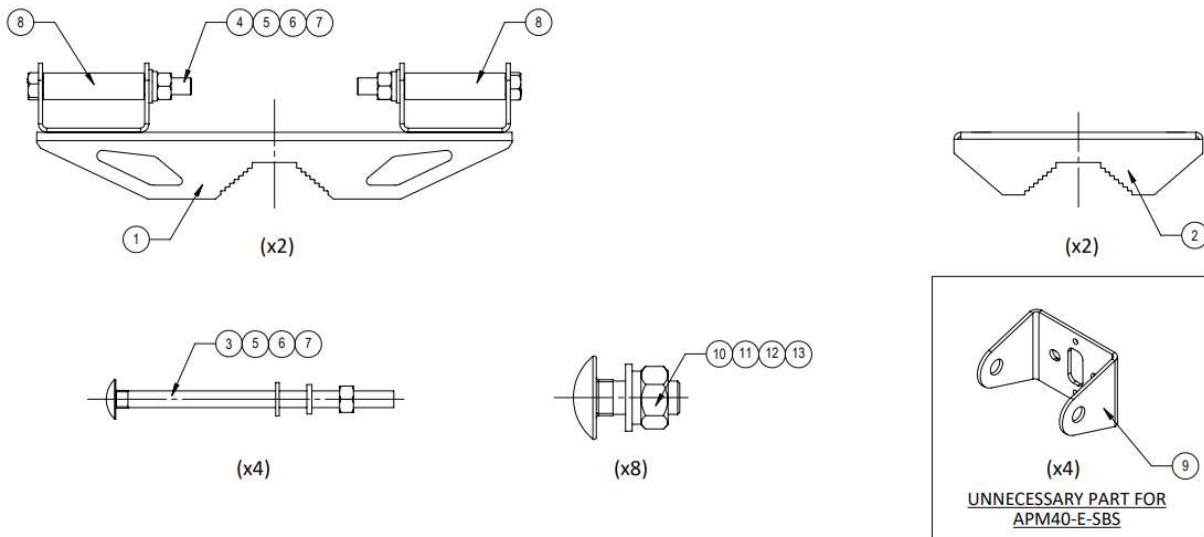


ITEM FOR APM40-E-SBS

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5.2 option 1: Item FOR -APM40-1E + E10T

ITEM#	DESCRIPTION	QUANTITY	APPLICABLE TO APM40-E-SBS
1	Clamp front ,light version	2	Y
2	Clamp rear ,light version	2	Y
3	M12-200,Galvanized,ISO8677 class8.8	4	Y
4	Screw H M12x110 CS 35K 8.8 GVRO ISO4017	4	Y
5	Washer FL 13x24x2.5 CS 200HV GVRO GB97	8	Y
6	Washer SP 12x3.5 65Mn 200HV GVRO GB7244	8	Y
7	Nut H M12x19x10 CS 35K 8 GVRO DIN934	8	Y
8	Tube, Al, 19*3, Long ,light version	4	Y
9	Mounting interface H43, 40-5, 2 Hole	4	NO
10	Screw Carriage M8x20, BigHead, CS GVRO	8	Y
11	Washer FL 16x8.4x1.6 CS GVRO GB97	8	Y
12	WASHER SP M8X2.1 CS GVRO GB93	8	Y
13	Nut H M8 CS GVRO GB6170 Class 8	8	Y



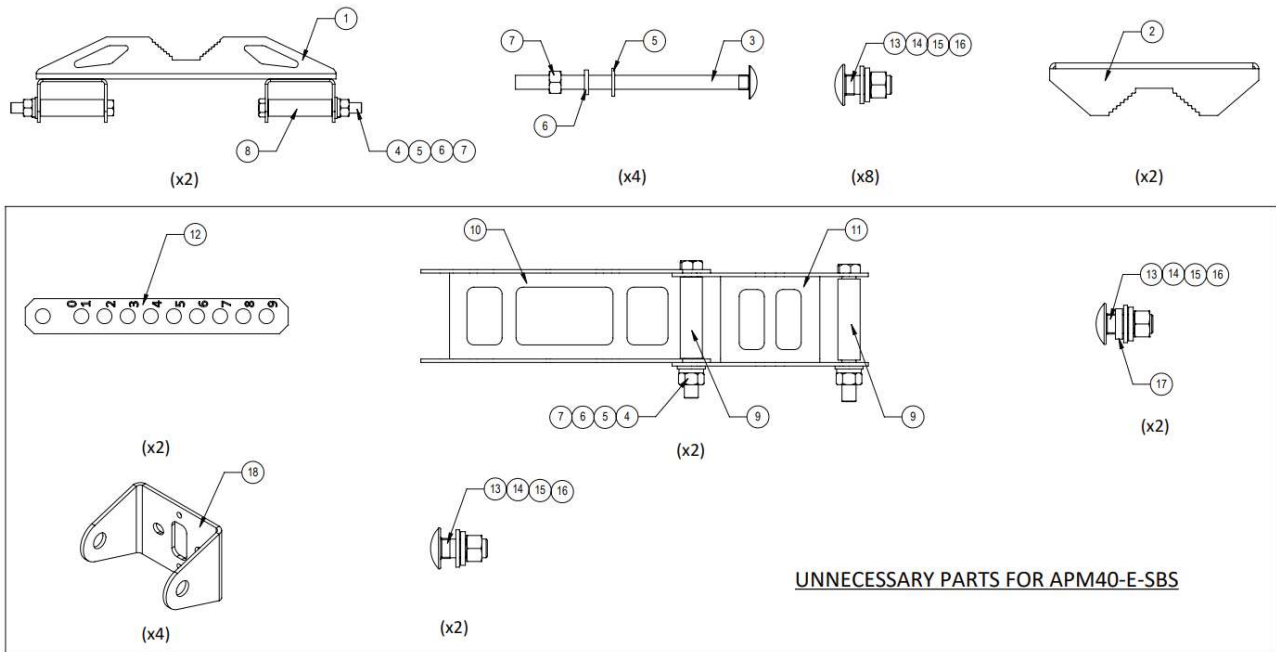
ITEM FOR APM40-1E+E10T

Mounting Instructions for APM40-E-SBS

5.3 option 2: Item FOR -APM40-5E(LIGHT) + E10T

ITEM#	DESCRIPTION	QUANTITY	APPLICABLE TO APM40-E-SBS
1	Clamp front ,light version	2	Y
2	Clamp rear ,light version	2	Y
3	M12-200,Galvanized,ISO8677 class8.8	4	Y
4	Screw H M12x110 CS 35K 8.8 GVRO ISO4017	8	Y
5	Washer FL 13x24x2.5 CS 200HV GVRO GB97	12	Y
6	Washer SP 12x3.5 65Mn 200HV GVRO GB7244	12	Y
7	Nut H M12x19x10 CS 35K 8 GVRO DIN934	12	Y
8	Tube, Al, 19*3, Long ,light version	4	Y
9	Tube, Al, 19*3, Short ,light version	4	NO
10	Downtilt scissor ,light version	2	NO
11	Clamp front ,light version	2	NO
12	Downtilt indicator ,light version	2	NO
13	Screw Carriage M8 x 20, CS GVRO	4	Y
14	SPRING LOCK WASHER A8 DIN127 A2	4	Y
15	FLAT WASHER DIN125 8.4 A2	4	Y
16	M8X1,25 HEX NUT STL GALV	4	Y
17	Stub Spacer 3mm	2	NO
18	Mounting interface H43, 40-5, 2 Hole	4	NO

Mounting Instructions for APM40-E-SBS



ITEM FOR APM40-5E(LIGHT)+E10T

6. ASSEMBLY OF COMPONENTS TO ANTENNA

Thoroughly read the directions included in this bulletin before starting to assemble parts. Carefully remove all parts from the shipping boxes. Examine the antenna and hardware to ensure that all parts are enclosed and that there is no physical damage.

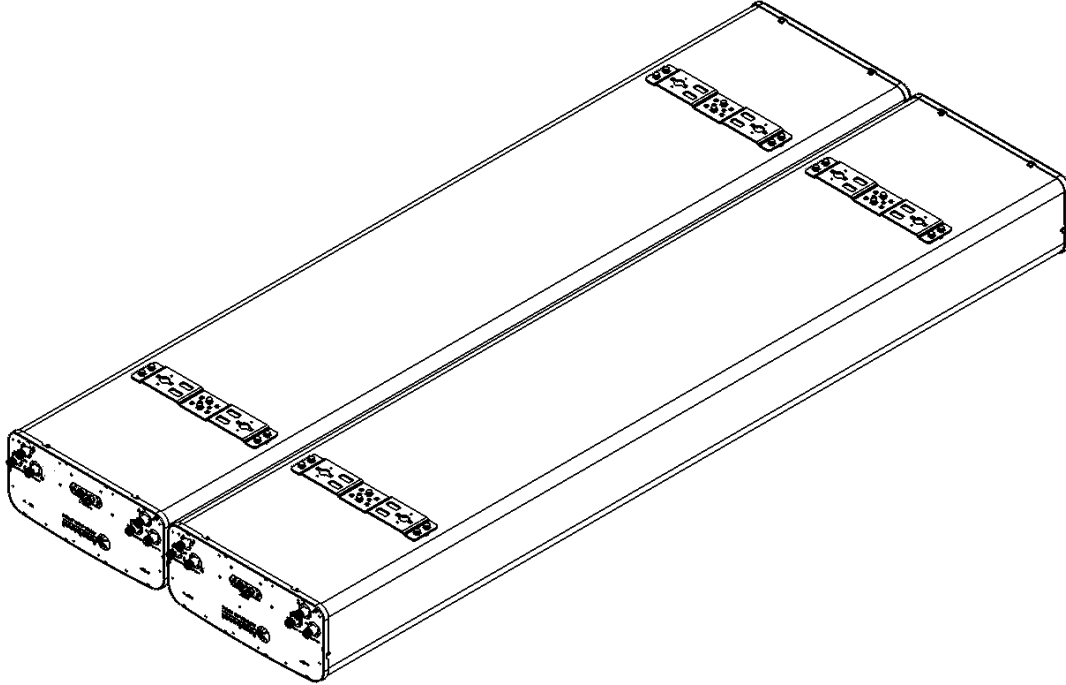
Due to the heavy weight of the antenna and in order to have better, safer and easier assembly, the operator can preassemble all the parts together on the ground according to the detailed view below. During the preassembly, all the fixations shall be assembled but not fully tightened, extreme caution to be used that all nuts bolt and washers are fitted according to the assembly diagram before lifting can take place. Then use lifter to lift the antenna to the correct pole side, this will enable ease of installation.

For the lifting points it is recommended to use the top and bottom interface brackets instead of the antenna.

After attached the antenna with the pole, all the fixation should be locked tightly according to the required torque specification [refer torque table].

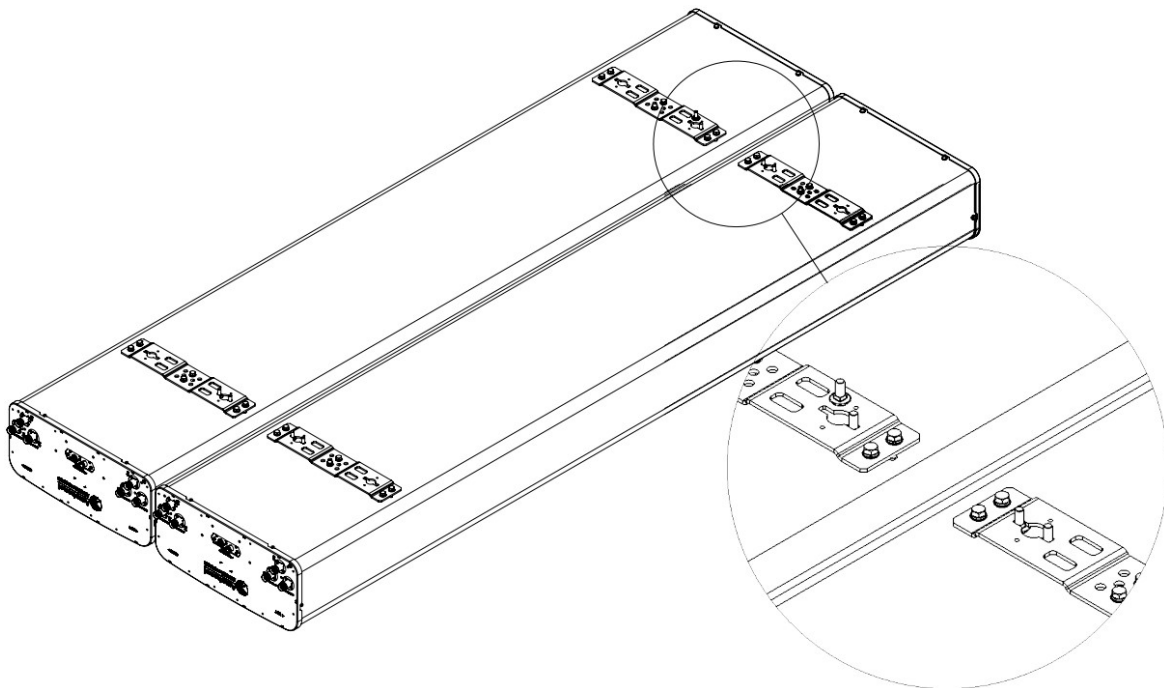
Mounting Instructions for APM40-E-SBS

6.1 Position two antennas on the bench so that the interface brackets are directed up.



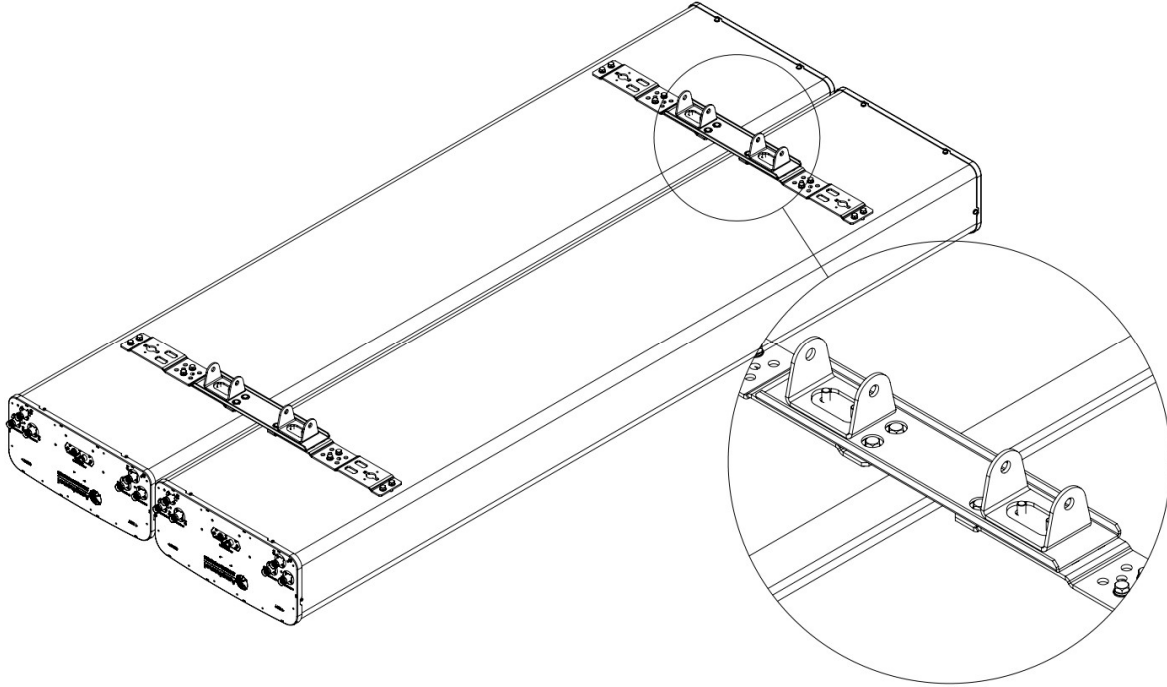
6.2 Place 8pcs M8x20 Carriage screws via big holes both TOP and BOT side.

(ps.: M8x20 Carriage screws can take from OPTION 1 or 2 accessory package, the same below)

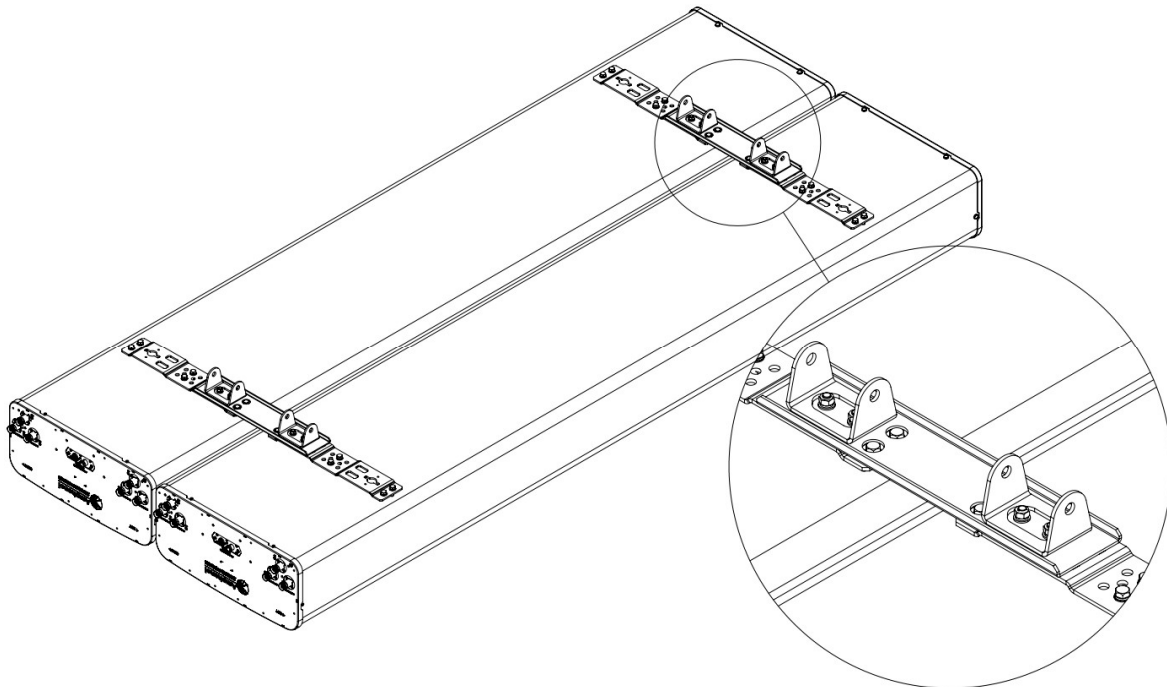


Mounting Instructions for APM40-E-SBS

6.3 Place Mounting for APM40-E-SBS through 4pcs M8x20 carriage screws both TOP and BOT side.

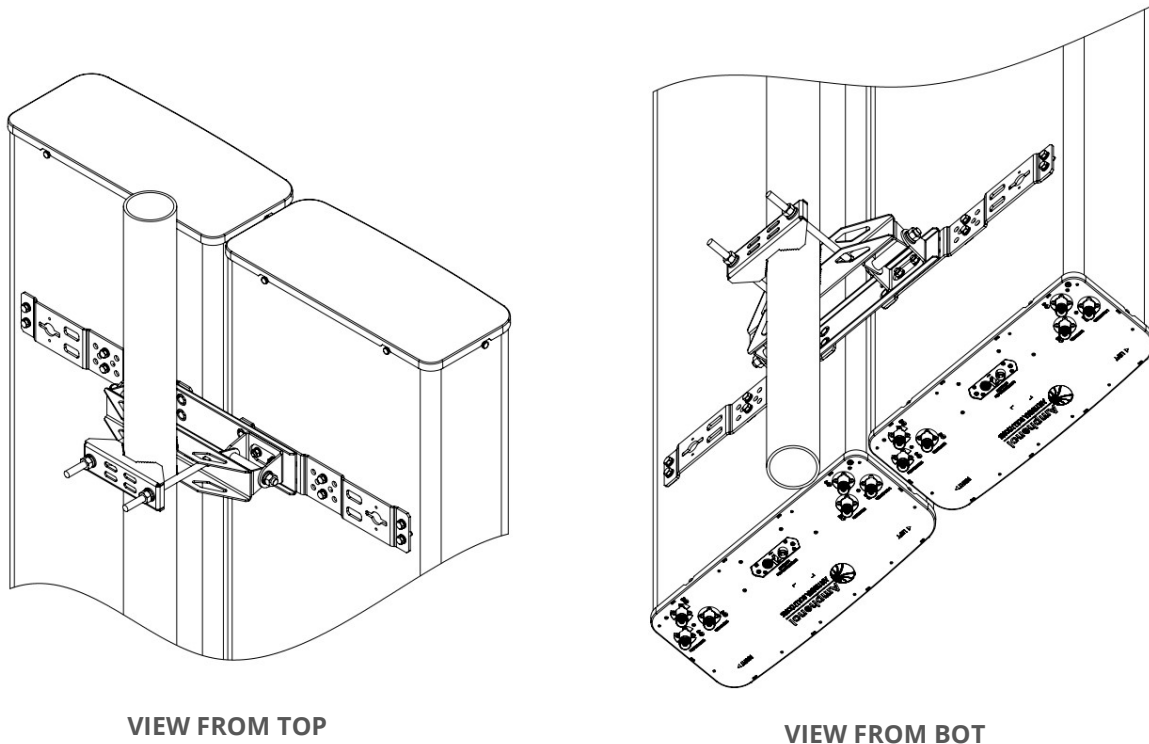
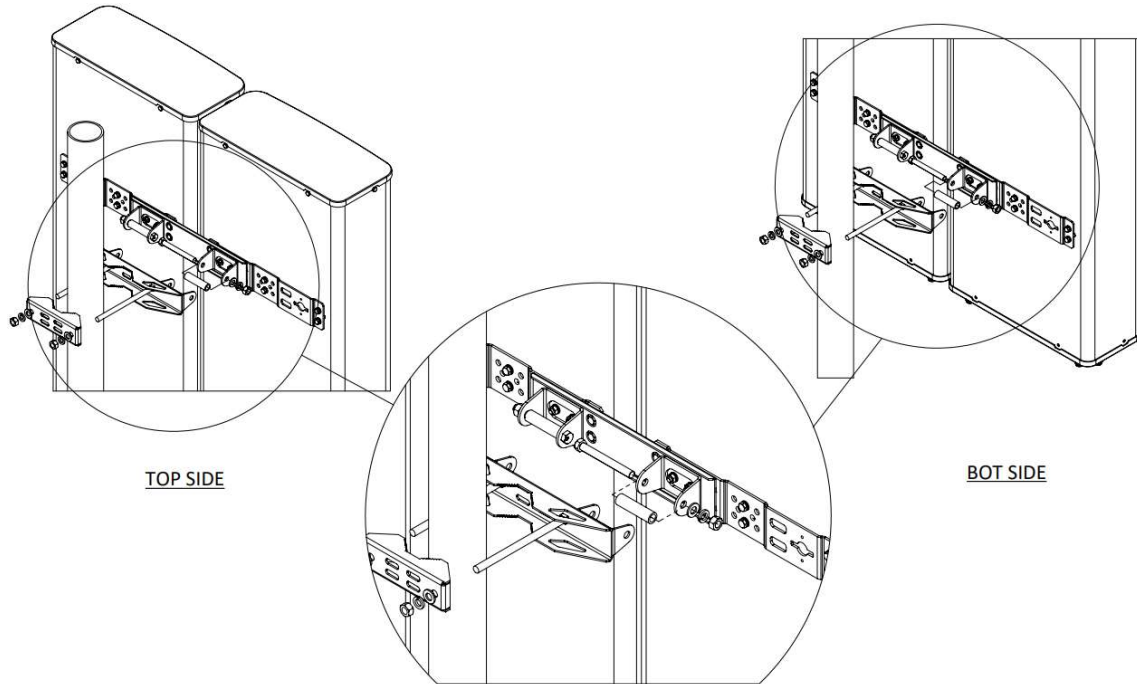


6.4 Place M8 flat washer, spring washer and nut one by one and tightly them according to the required torque specification [refer torque table]. Same as TOP and BOT side.



Mounting Instructions for APM40-E-SBS

6.5 All the fixations shall be preassembled but not fully tightened. All nuts, bolts and washers shall be fitted according to the assembly diagram as shown below. After lift the antenna to the correct pole side, all the fixation should be locked tightly according to the required torque specification [refer torque table].



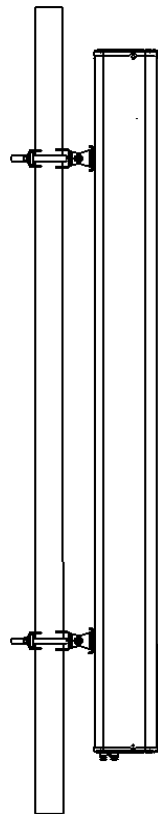
Mounting Instructions for APM40-E-SBS

7. TIGHTENING TORQUE VALUES

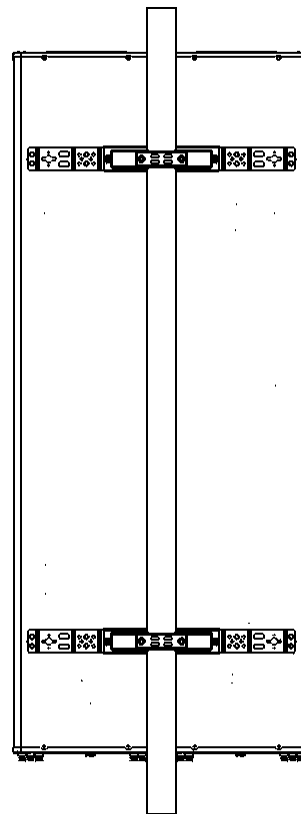
Unless otherwise stated, the following general tightening torque values shall be used for metric hexagon bolts and screws, coarse pitch threads, property class 8.8.

Diameter	Pitch (mm)	Bolt Tension (kN)	Torque (Nm)
M12	1.75	23.8	60
M8	1.25	9.5	16

8. BRACKET SEPARATION



SIDE VIEW



BACK VIEW

9. MAINTENANCE

Under normal conditions, no maintenance is necessary. However, the antenna should be visually inspected at regular intervals for damage (e.g.: due to lightning strikes, falling ice, etc.). Periodic checks should be performed to verify correct torque and bracket clearance settings

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