

P040-0015 Revision A, March 2021

GENERAL INFORMATION

The Metro Cell antenna (Figure 1) is a wide band, compact antenna.

It is the responsibility of qualified personnel to determine the best method for securely anchoring the bottom mounting bracket of the antenna to the mounting surface.

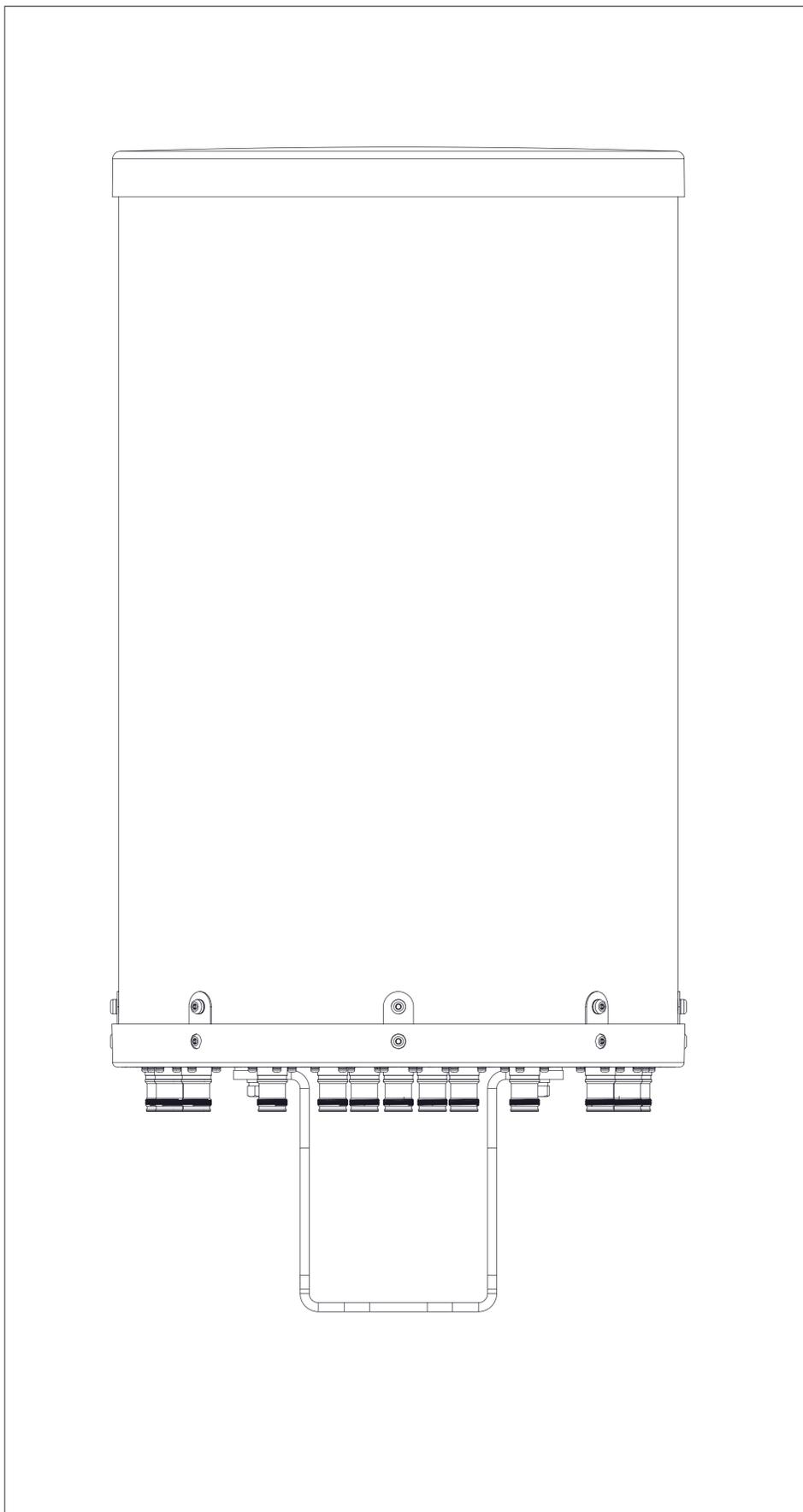


Figure 1. Metro Cell Antenna

INSTALLATION INSTRUCTIONS

- When unpack the antenna, do pay attention to ports protection before place antenna on ground.
- Examine antenna and hardware to ensure that all parts are enclosed and that there is no physical damage.
- Verify that the frequency range shown on the label on the bottom of the antenna matches the frequency range of the station equipment.

Notice:

The designed Mounting Interface of CommScope Small Cell models is the center 25mm diameter hole and surrounding 3pcs 8mm diameter holes on Bottom Mounting Bracket. Center hole serves as the mounting function, surrounding holes serve as orientation fixing function.

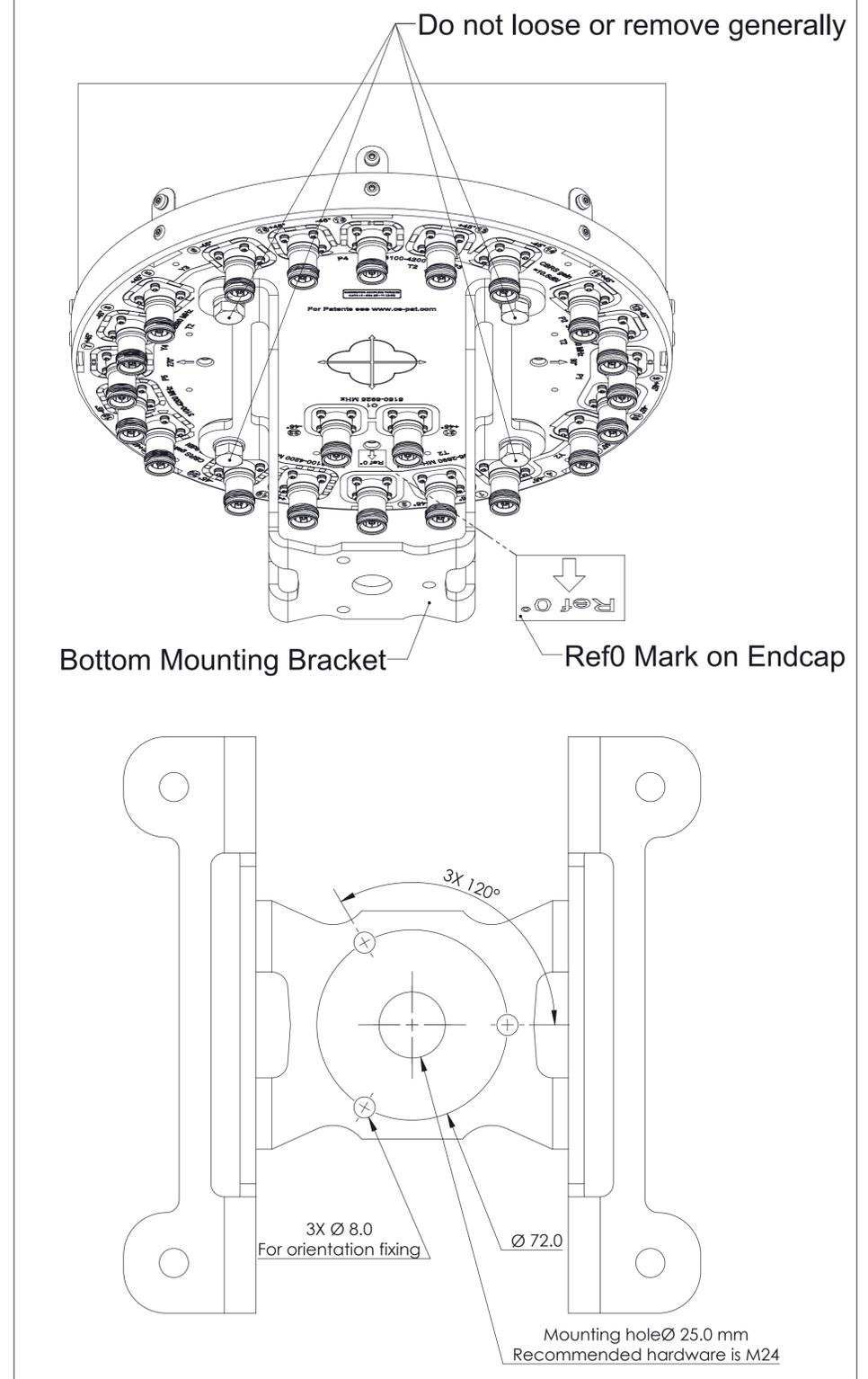


Figure 2. Mounting Interface of Antenna

(continued on page 2)

(Continued from page 1)

Notice:

Before mounting the bottom mounting bracket to the mounting surface, position the antenna unit so that the antenna is oriented as desired. Check Ref0 mark on bottom endcap for orientation reference. Figure 2 details the position of Ref0 mark.

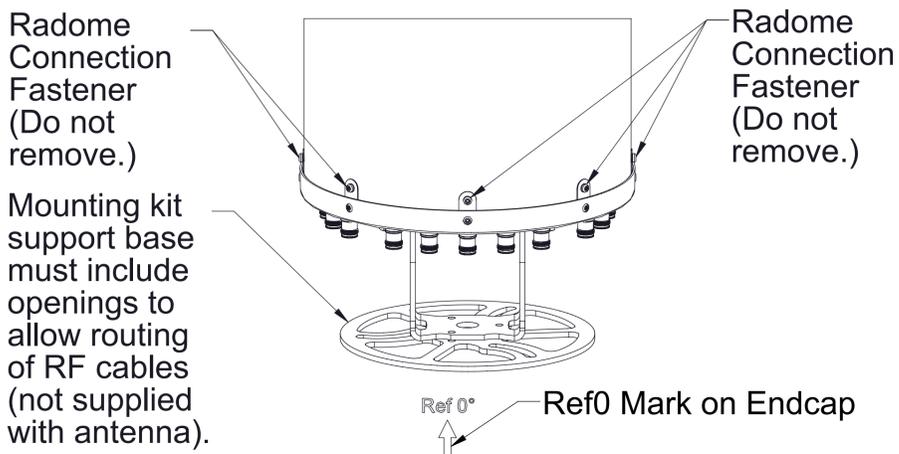
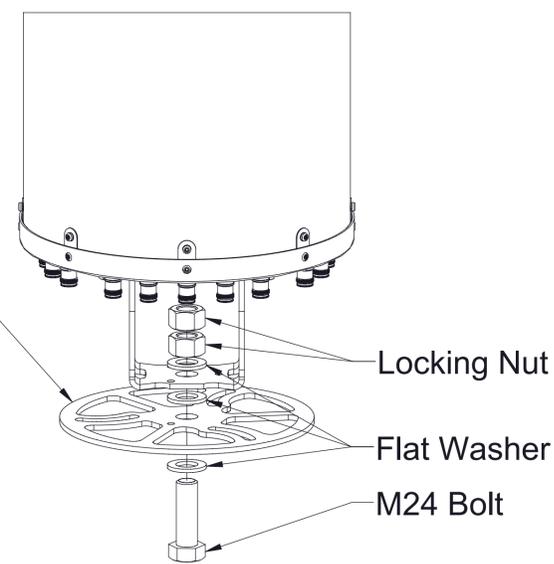


Figure 3. Determining Orientation for Each Antenna

Mounting Kit Support Base (not supplied with antenna)



Notice:

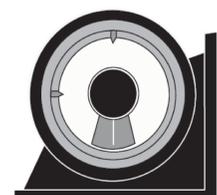
Torque hardware to 100 Nm (880 lbf-in), hardware not supplied with antenna.

Figure 4. Antenna Installation Interface

REPLACEMENT GUIDANCE OF BOT MTG BRACKET

Bottom Mounting Bracket is INHERENTLY one part of the antenna. Generally, do not recommend replacing it. If customer do need to replace it, following below guidance and requirement:

1. Do NOT replace or discard any other part except the Bottom Mounting Bracket.
2. Keep using original M10 fasteners on antenna (they are designed for minimizing PIM impact).
3. Customized bracket needs to have 4 mounting points (same as original bracket), mounting area should not be smaller than original bracket.
4. Recommended bracket thickness is 6mm, thickness MUST be within range 5 - 7mm, otherwise PIM level may be influenced.
5. Apply Loctite 425 to M10 stud and then tighten the M10 fasteners, ensure torque is well controlled with wrench, recommended torque is 30 Nm (266 LB-IN).



Use inclinometer to verify antenna is truly vertical.

Mounting Kit Support Base (not supplied with antenna)

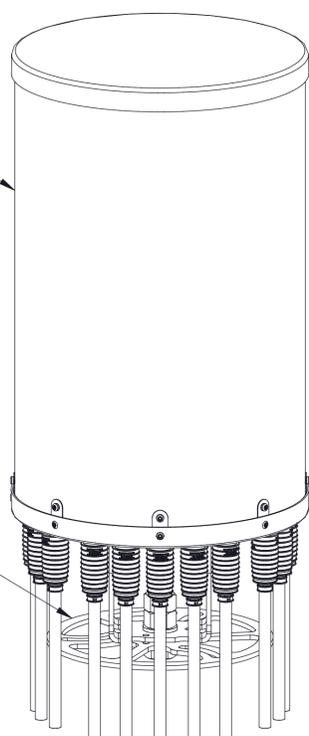


Figure 5. Routing RF Cable and Vertical Alignment

1. Refer to Figures 2, 3 and 4 for mounting and pattern alignment. It is recommended that the mounting holes be marked and made ready in the mounting surface prior to installing the antenna.
2. Attach the RF cables to the antenna input connectors and torque the 4.3/10 connector to 5-8 Nm (45-71 LB-IN), refer to Figure 5.

SAFETY NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

CommScope disclaims any liability or responsibility for the results of improper or unsafe installation practices.

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.