Wistron NeWeb Stark ODU/IDU Fixed Wireless Installation Guide

Contents [hide

1 Stark ODU/IDU Fixed Wireless
2 Product Information
3 Product Usage Instructions
4 Stark ODU/IDU Installation Guide
4.1 J-Pole Installation
4.2 GND Box Installation
4.3 Wall/Pole Mount Securing Mechanism
4.4 IDU Bracket for Wall Mount
5 IDU Gecko Tape Preserving/Re-Attaching Process
6 Gecko Tape Plate Re-attach Process
7 Documents / Resources
7.1 References
8 Related Posts

Wistron NeWeb Corp.

Stark ODU/IDU Fixed Wireless

Product Information

The Stark ODU/IDU Installation Guide provides instructions for the installation of the Stark ODU/IDU device, which is intended for point-to-point 5G mmWave digital communications applications. The CPE front side, which is the mmWave antenna side, should be installed and operated under line-of-sight condition. The installation must be carried out by professional, trained technicians.

The guide includes instructions for J-Pole installation, GND Box installation, Wall Mount installation, Pole Mount installation, Wall/Pole Mount Securing Mechanism, Take out IDU Device from ODU, IDU Window/Wall Mount Bracket, and IDU Gecko Tape Preserving/Re-Attaching Process. The guide also provides a note on screw tightening with specified torque.

Product Usage Instructions

J-Pole Installation

Step 1: Ensure that the Stark ODU/IDU device is installed by a professional, trained technician.

Step 2: Use a torque wrench to tighten screws if the torque is specified.

Step 3: For J-Pole installation, use the screw head with HEX head and tighten the nut to fix the angle.

Step 4: Finish the waterproof cable gland setup as follows:

- Put the gasket and clamp ring in.
- Screw the gland clamp ring.
- Use a wrench to fix the screwing gland with a torque of 25~27kgf-cm.
- Seal the cap with a wrench using a torque of 15~25kgf-cm.

Step 5: Ensure that the cable diameter is between 6.5~9mm and the access diameter is 19mm max. Do not use cables with a latch jacket as it will occupy most of the space and make it hard for the installer to press it to desert the cable.

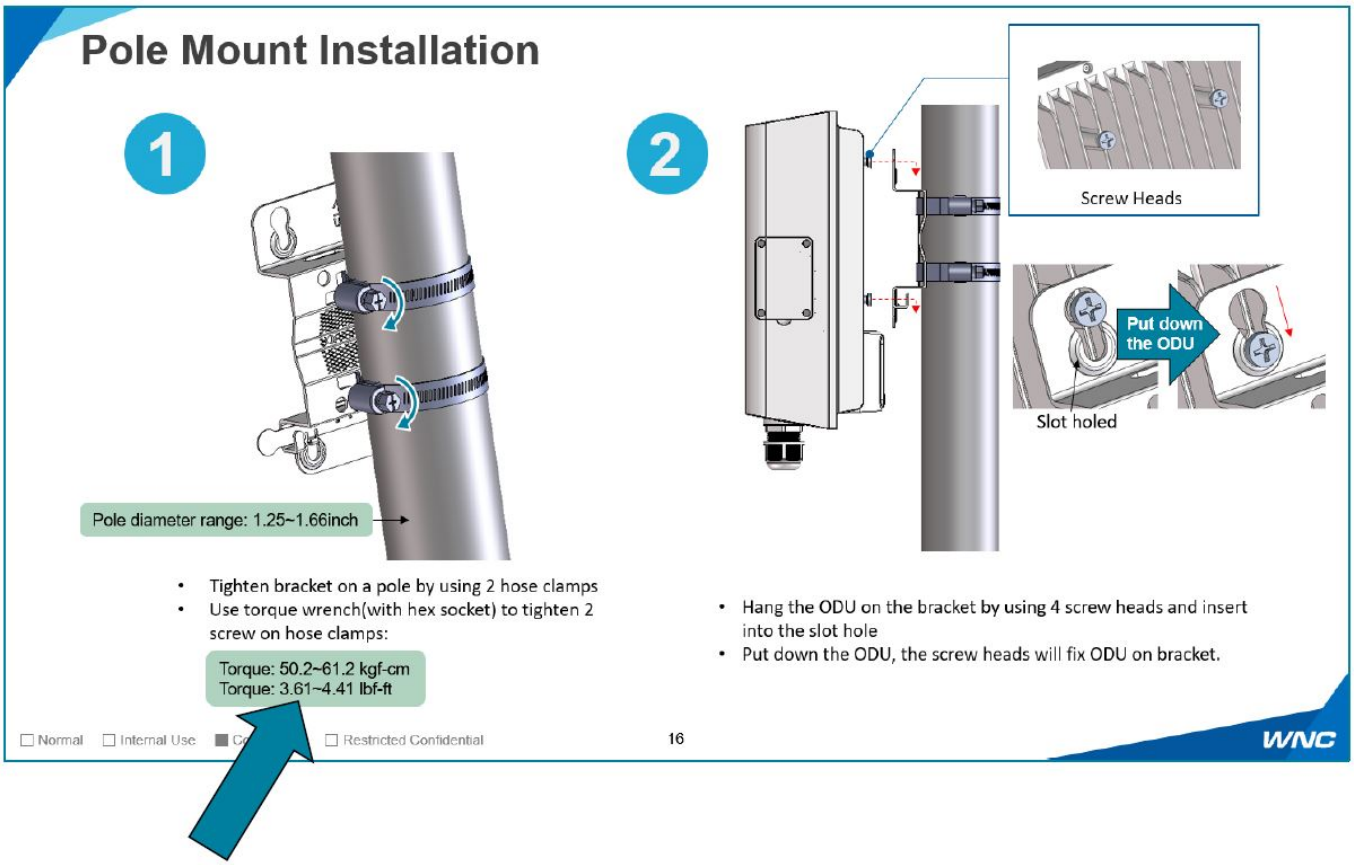
Wall Mount Installation

Ensure that the Stark ODU/IDU device is installed by a professional, trained technician. Use a torque wrench to tighten screws if the torque is specified. Mount the bracket onto the wall using the screw head with HEX head and tighten it with a torque of 140 +/-10 kgf-cm or 10.12 +/-0.72 lbf-ft.

Stark ODU/IDU Installation Guide

- The installations must be carried out by professional, trained technicians.
- This installation is intended for point-to-point 5G mmWave digital communications applications, the CPE front side which is mmWave antenna side should be installed and operated under line-of-sight condition.

Note on Screw Tightening with Specified Torque
Please use torque wrench to tighten screws if the torque is specified.



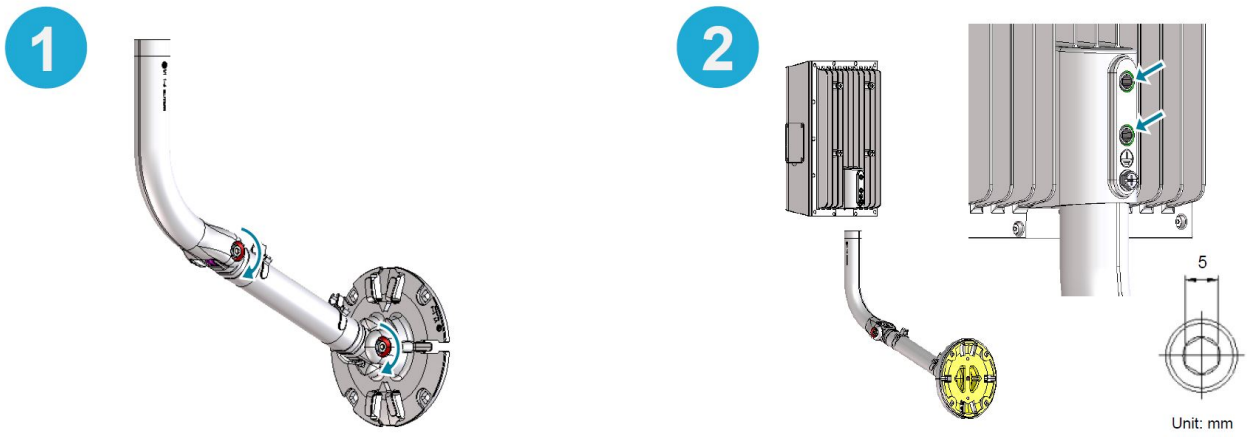
J-Pole Installation

1. Adjust pole angle to best meet base station direction.

   Tighten 2 elbow nut to fix the angle:

   - **Torque:** 10.12 +/-0.72 lbf-ft
   - **Torque**: 140 +/-10 kgf-cm

     Detail of the elbow screw is shown in next page
2. Hang the ODU device on the J-Pole Tightening two HEXI screw after ODE hang in place (screw had pre-mounted with j-pole already)
   - **Torque:** 60 +/-10 kgf-cm
   - **Torque:** 4.32 +/-0.72 lbf-ft



Detail of the elbow screw:

3.

Tighten 4 screws to fix the base bracket onto the wall.

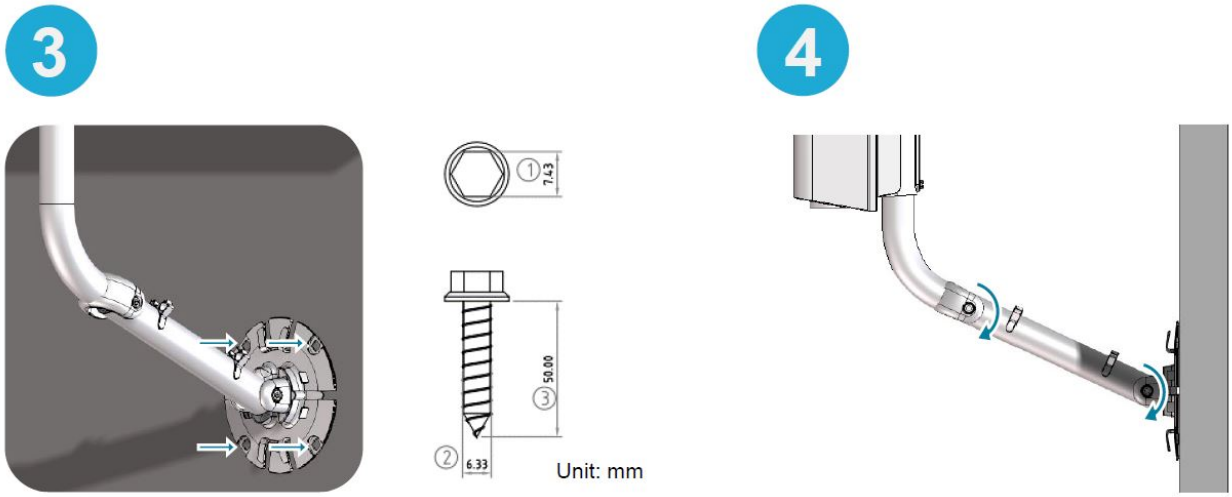
Screw information:

- Screw Type: ¼”x2” Wood Screw
- Screw Head: HEX head

4. (If need)Loosen 2 nuts and re-adjust pole angle to best meet base station direction.

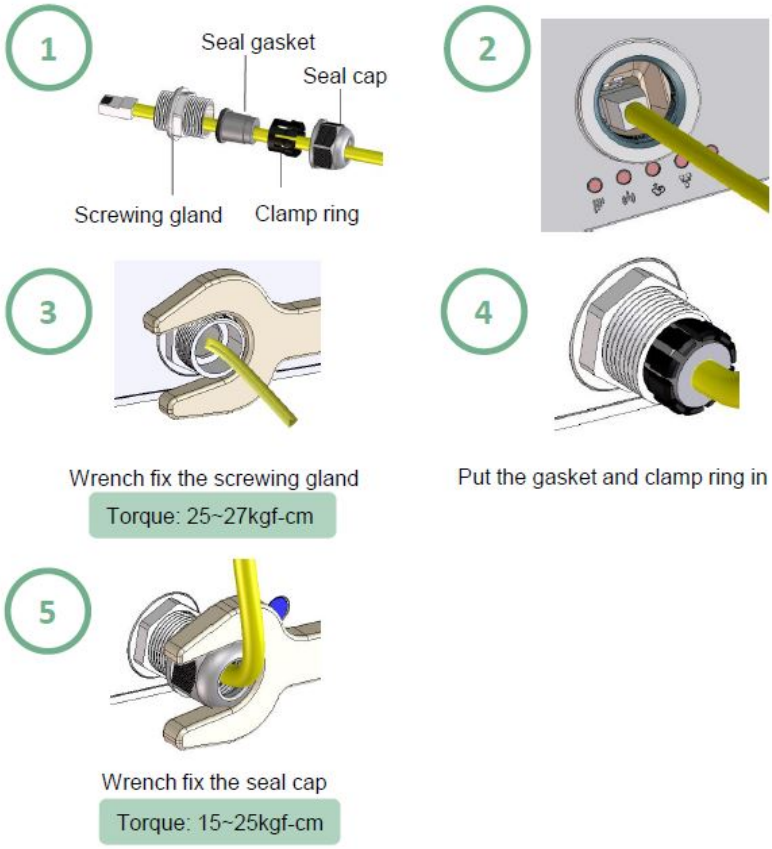
   Tighten 2 elbow nut to fix the angle:

   - **Torque:** 140 +/-10 kgf-cm
   - **Torque:** 10.12 +/-0.72 lbf-ft



5. **J-Pole Installation & cable dimension constraint**

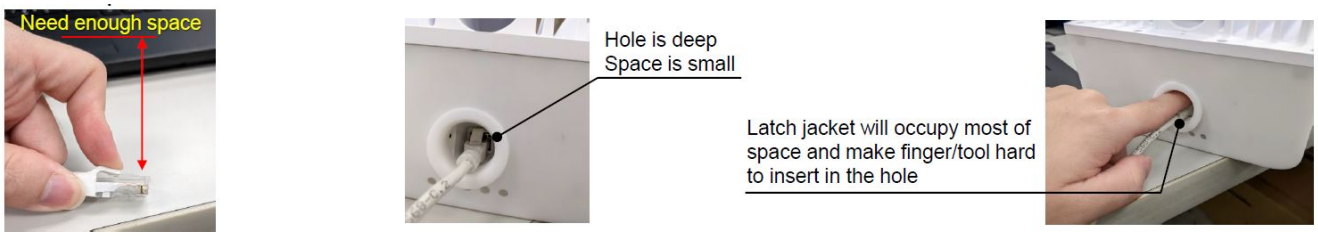
   Finish the waterproof cable gland setup as below.



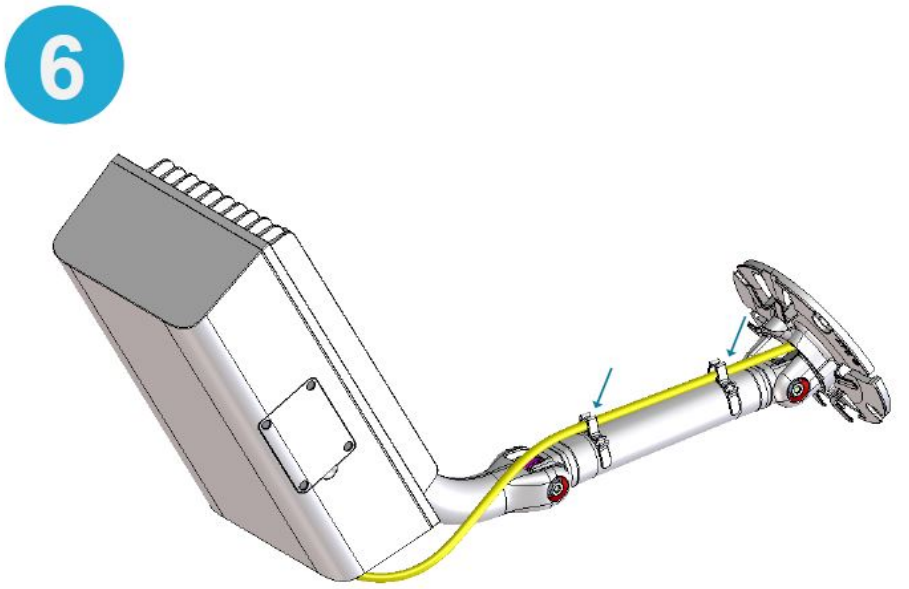
Note: For ODU installation, please notice that cable size should not too big due to dimension constraint of cable gland.

Notice: Not recommend to use the cable with the latch jacket.

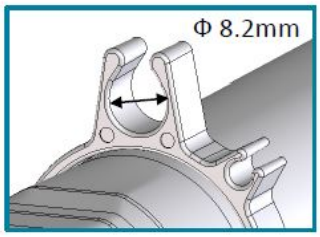
Since pressing latch need a lot of space to do it. Therefore, if cable with the latch jacket, installer will hard to press it to desert the cable.



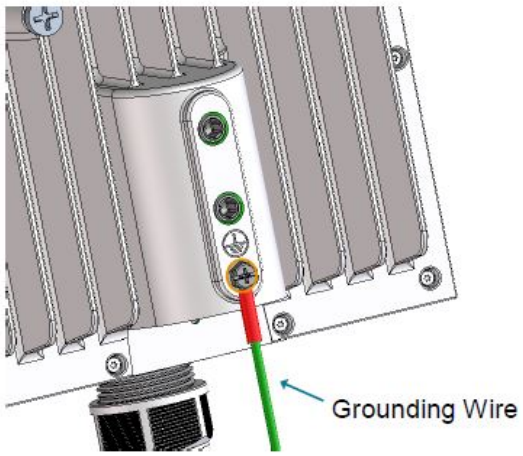
6.



- Fix the cable along the pole with the clamps, shown in.

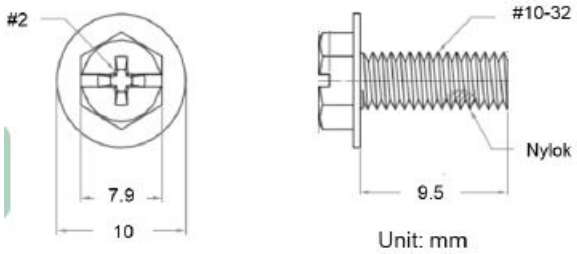


7. Tighten the GND cable, screw information:

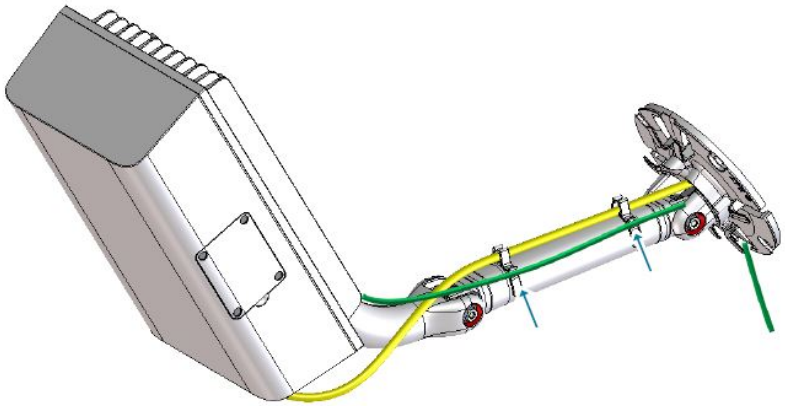


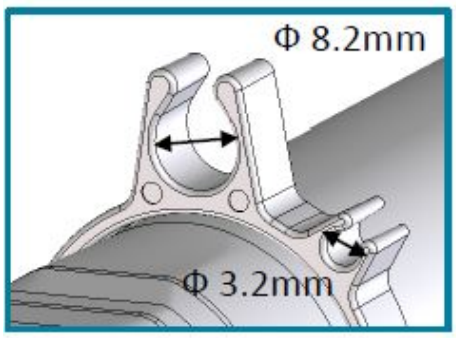
Screw Type: #10-32 Screw head: Phillips

Torque: 10 +/-1 kgf-cm Torque: 0.72 +/-0.07 lbf-ft



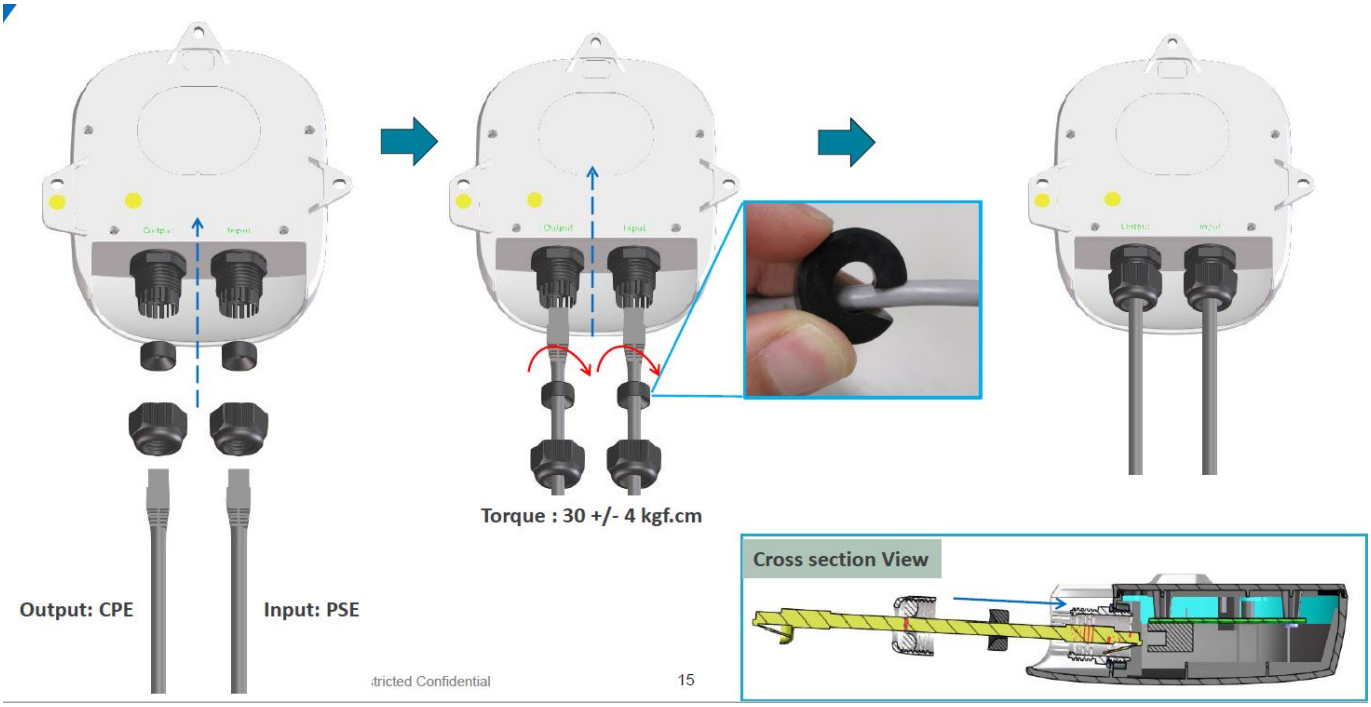
8. Route the grounding cable through the bottom of pole and straight down directly.





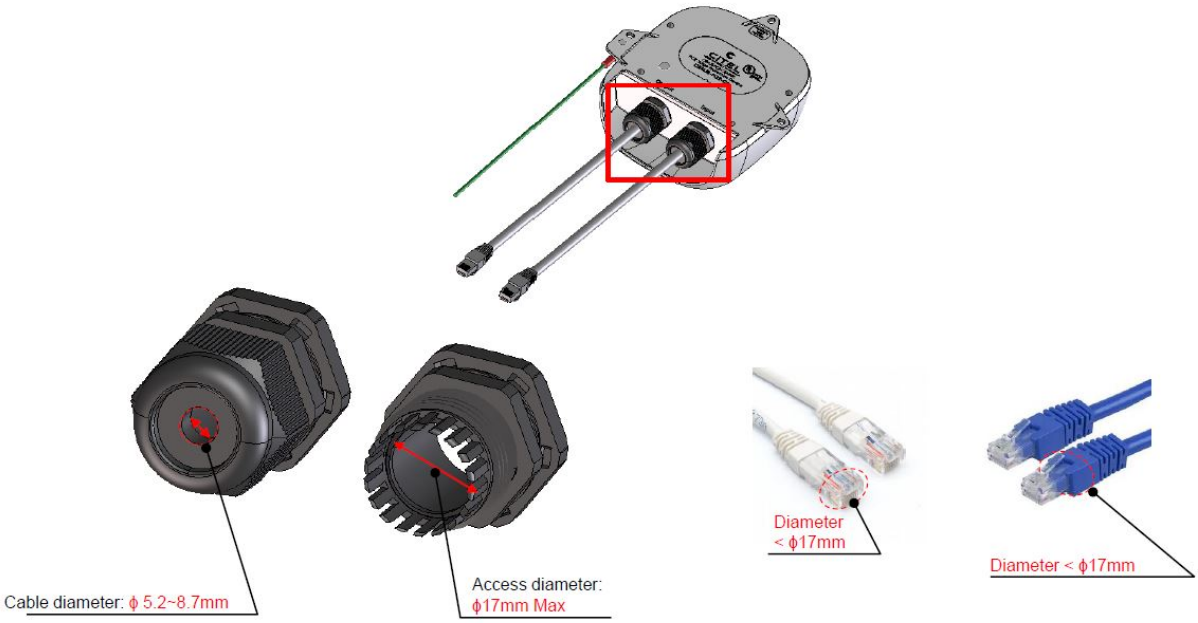
9. Attach plastic bracket cover. The cover can be twisted open and wrap the bracket. Make sure cable is directly downward.

GND Box Installation



Cable dimension constraint

Note: For GND Box installation, please notice that cable size should not too big due to dimension constraint of cable gland.

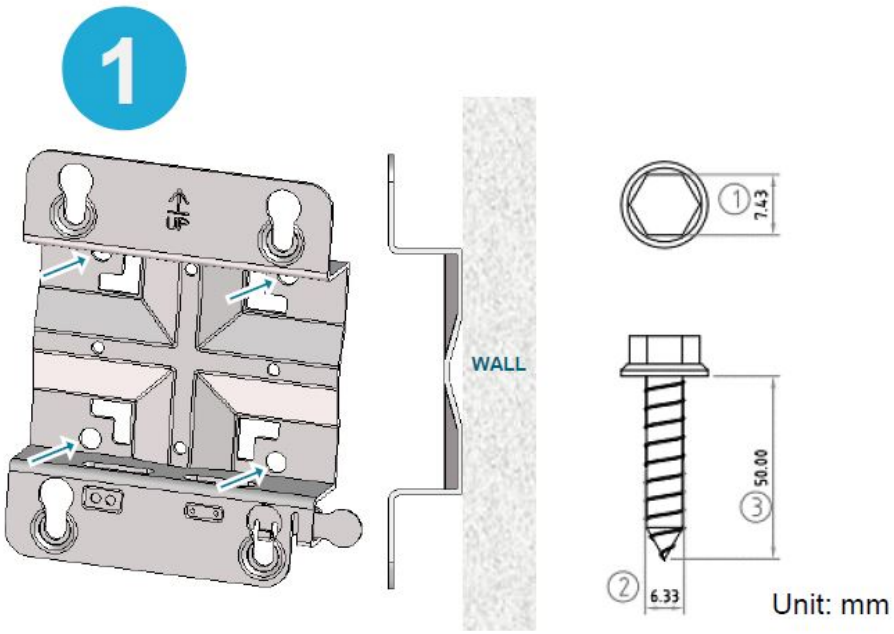


1. **Wall Mount Installation**

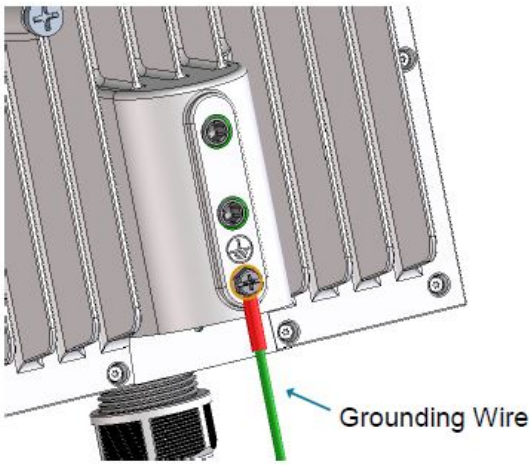
   Tighten 4 screws to fix the wall-mount bracket onto the wall.

   Screw information:

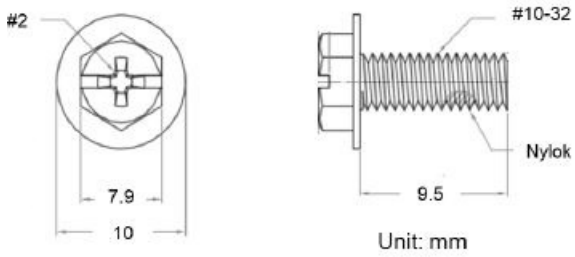
   - **Screw Type:** ¼”x2” Wood Screw
   - **Screw Head:** HEX head



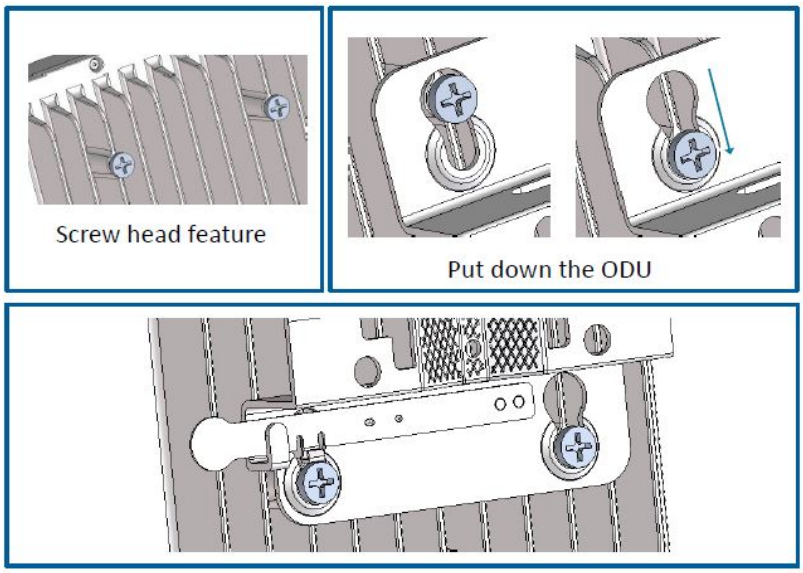
2. Tighten the GND cable, screw information:

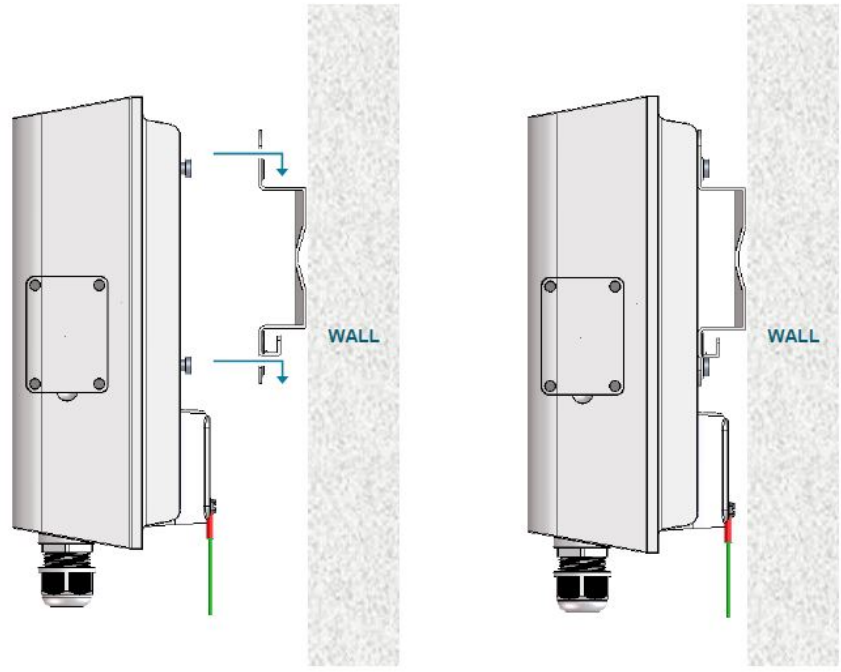


   - **Screw Type: #10-32 Screw head:** Phillips
   - **Torque: 10 +/-1 kgf-cm Torque:** 0.72 +/-0.07 lbf-ft

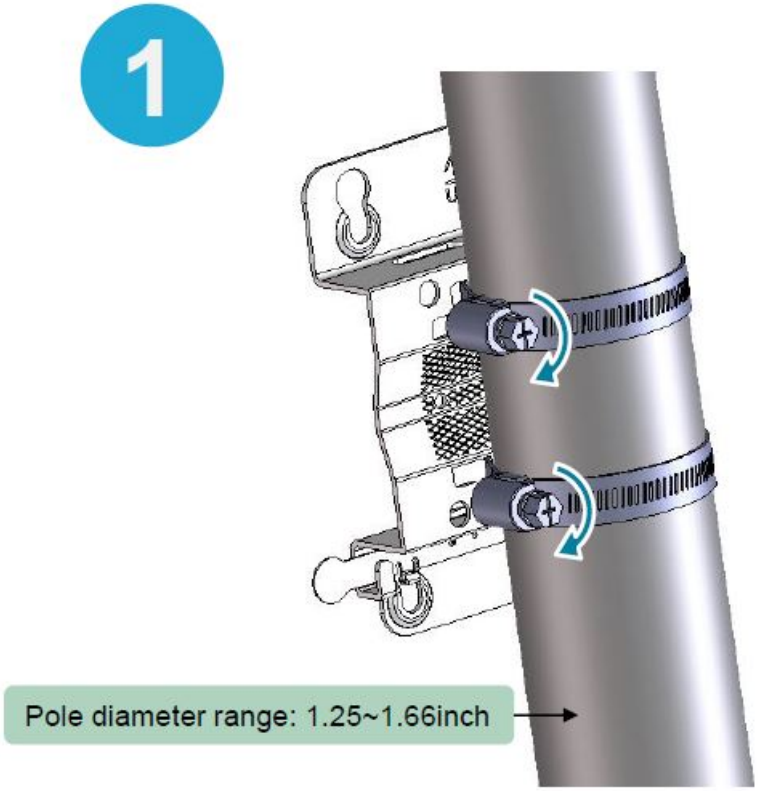


3.
   - Hang the ODU on the wall mount bracket by using 4 screw heads and insert into the slot hole
   - Put down the ODU, the screw heads will fix ODU on bracket.
   - Make sure the safety bar is securing well.





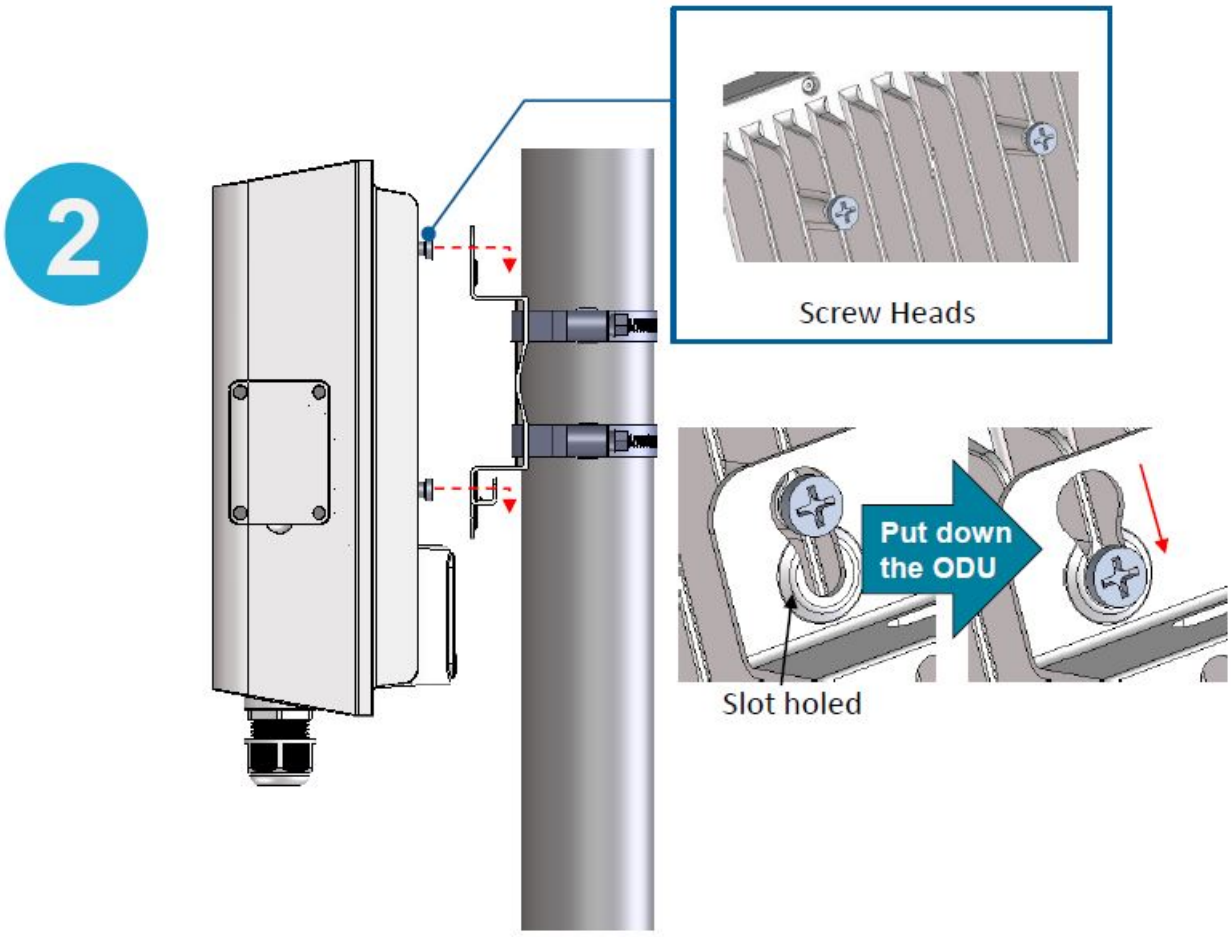
Pole Mount Installation



- Tighten bracket on a pole by using 2 hose clamps
- Use torque wrench(with hex socket) to tighten 2 screw on hose clamps:

  Torque: 50.2~61.2 kgf-cm

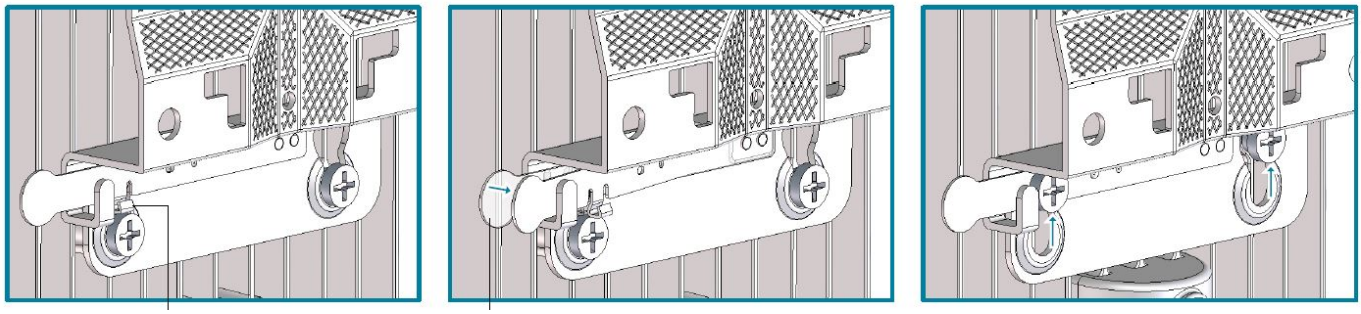
  Torque: 3.61~4.41 lbf-ft



- Hang the ODU on the bracket by using 4 screw heads and insert into the slot hole
- Put down the ODU, the screw heads will fix ODU on bracket.

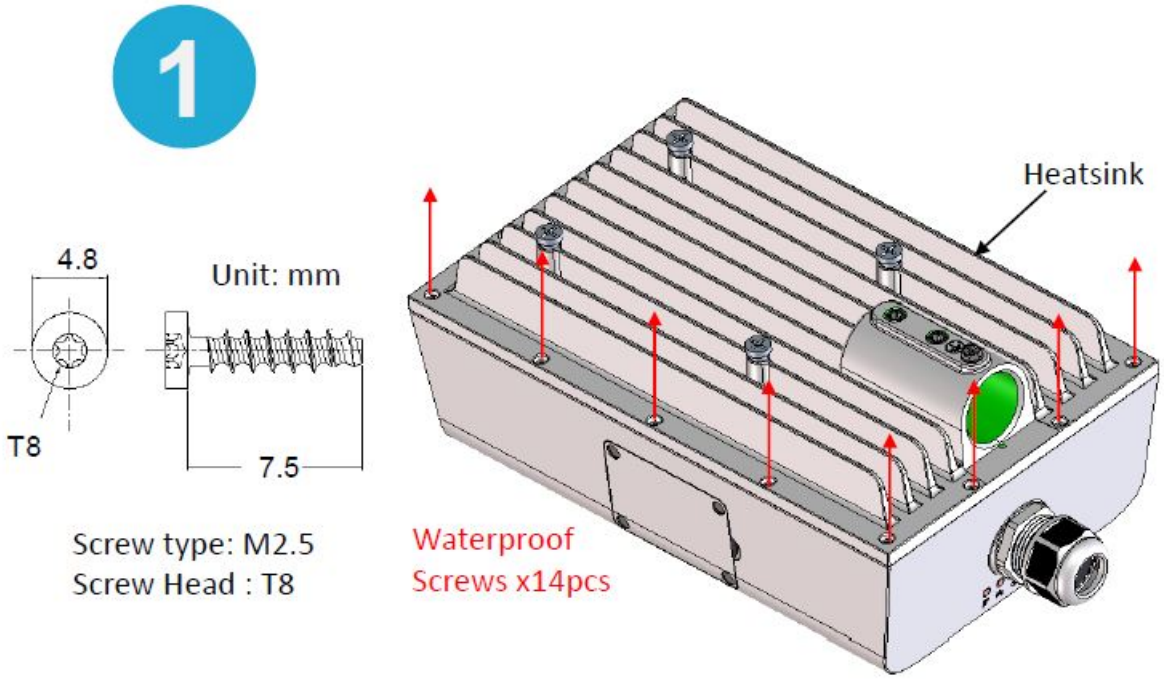
Wall/Pole Mount Securing Mechanism

ODU Bracket Securing Mechanism:
Releasing ODU from the Wall/Pole Mount Bracket

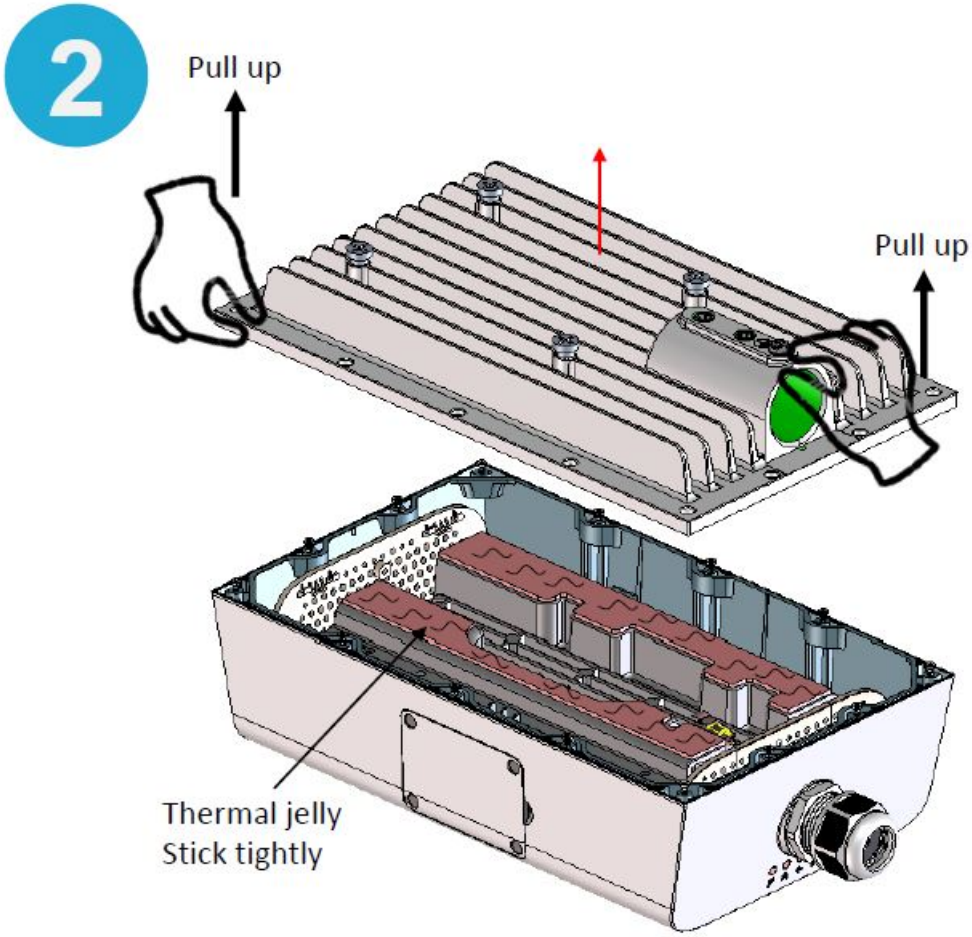


- This stop feature can make sure device is installed properly and won't be detach from bracket when user accidently push the device.
- Pull the latch to release the bar. There will be enough space to allow screw head detach from the bracket.
- Lift up the device and there will be enough space to allow screw head detach from the bracket.

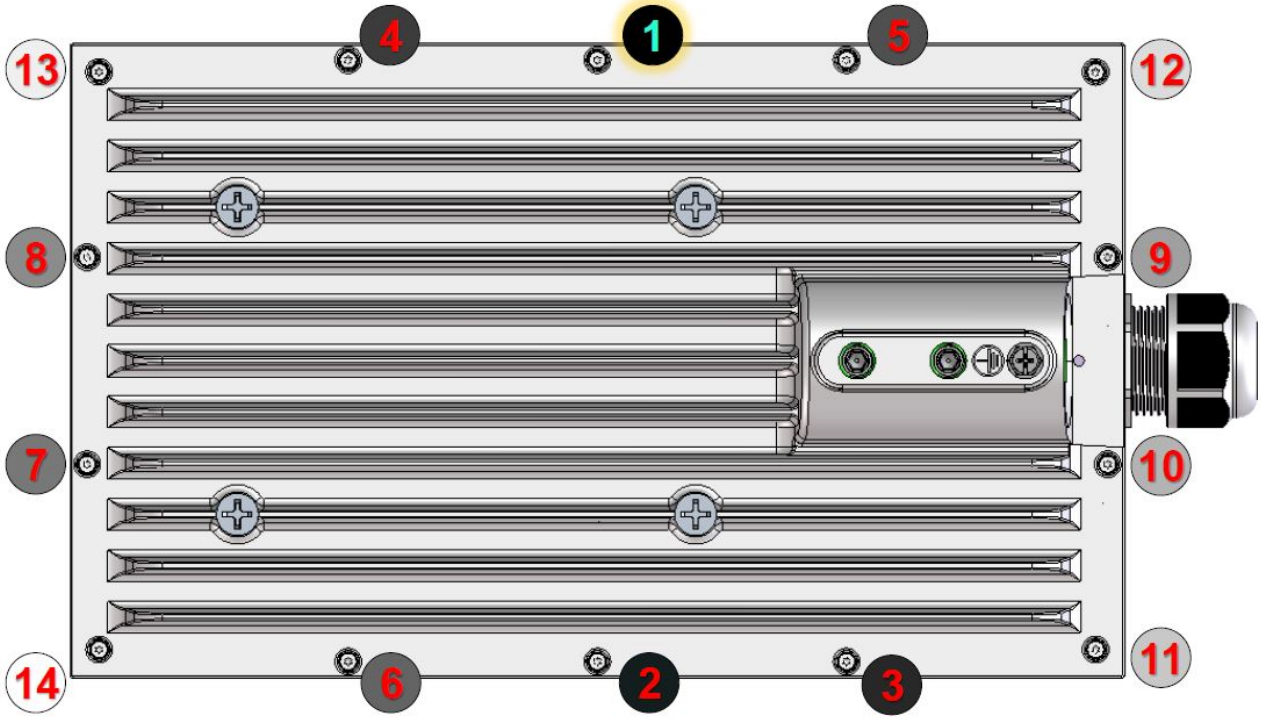
Take out IDU Device from ODU



- Take off the ODU from the bracket(wall/pole/J-pole) and put it on a plat base.
- Release 14 waterproof screws, then the heatsink could be took off.
  Please follow the sequence of removing screw

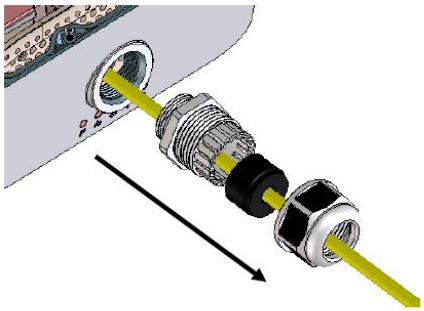


- Take off heatsink, and the IDU could be took out.
- Need pull force exert on heatsink to remove it, because thermal jelly stick it tightly.

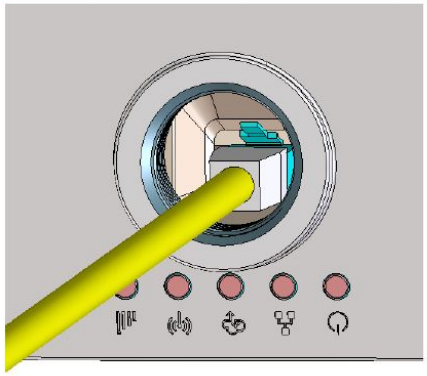


- Please follow the sequence of removing screw

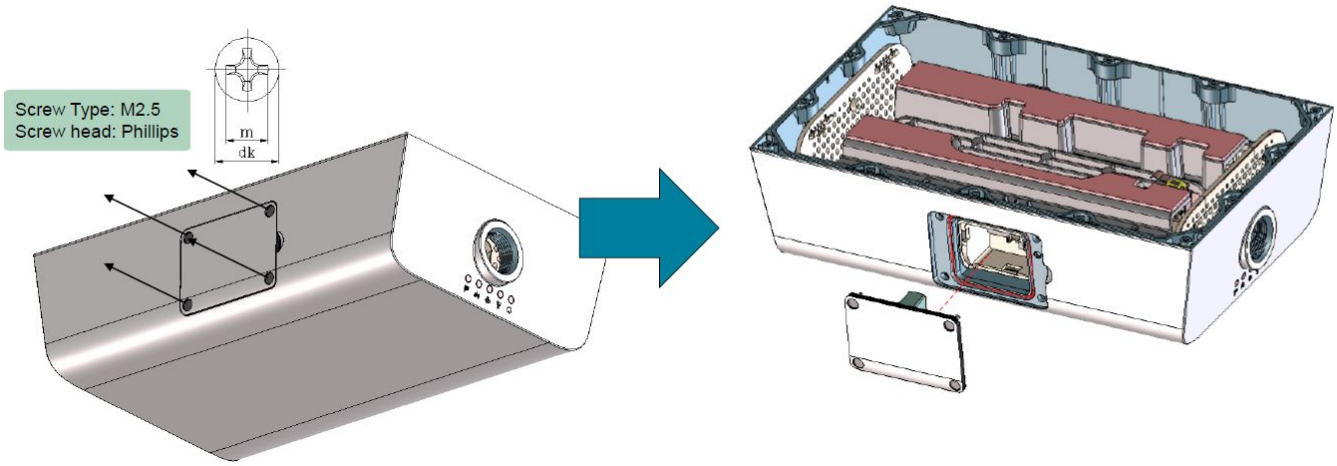
3 Release cable gland.



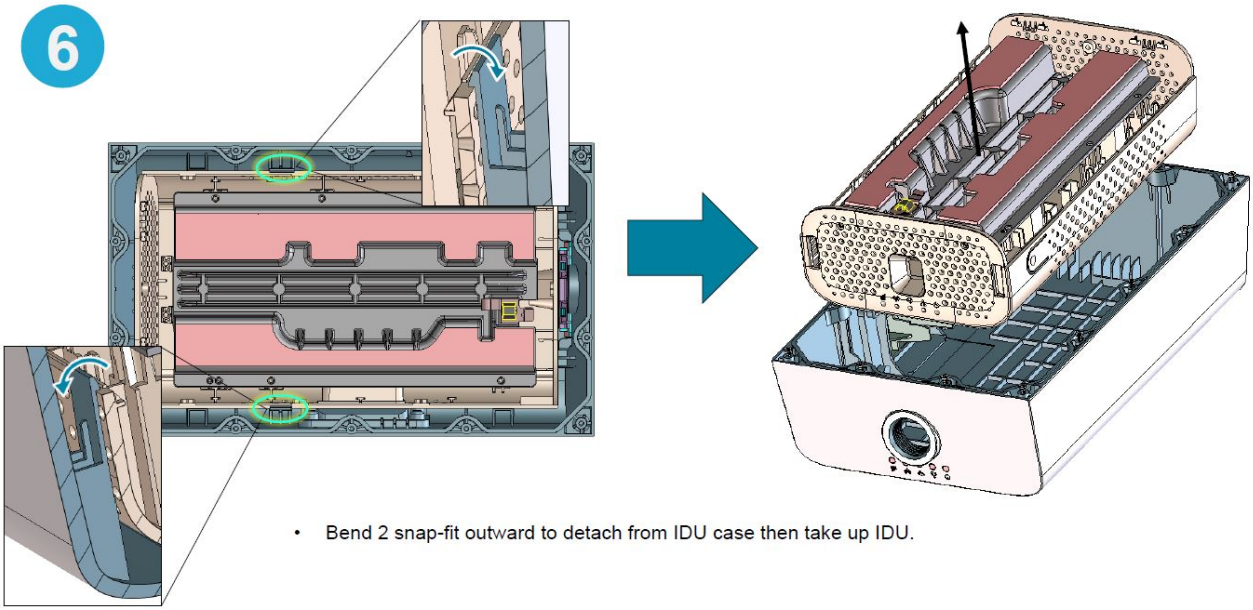
4 Remove POE cable.



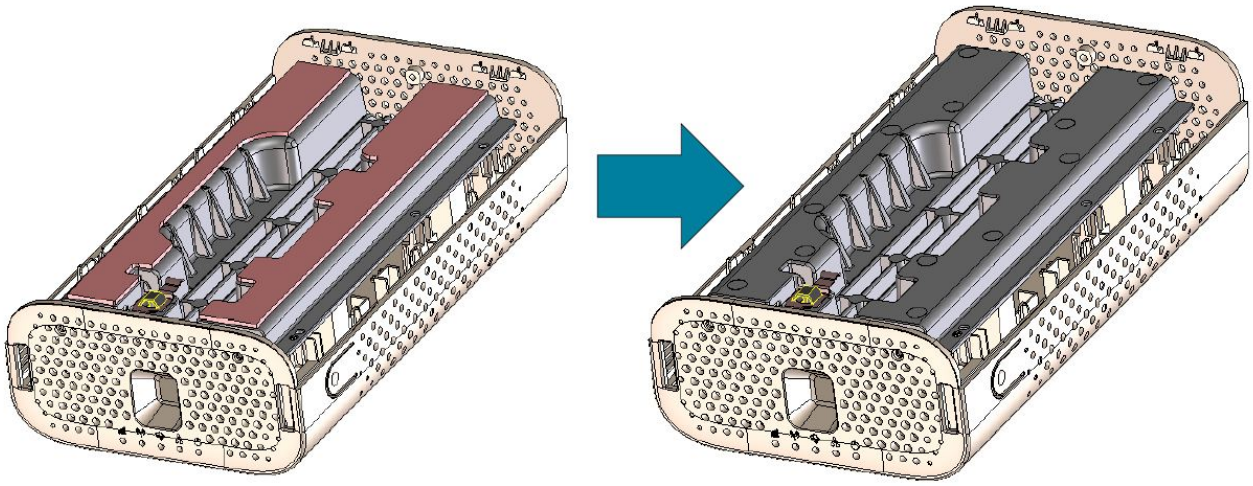
- Release cable gland.
- Remove POE cable.



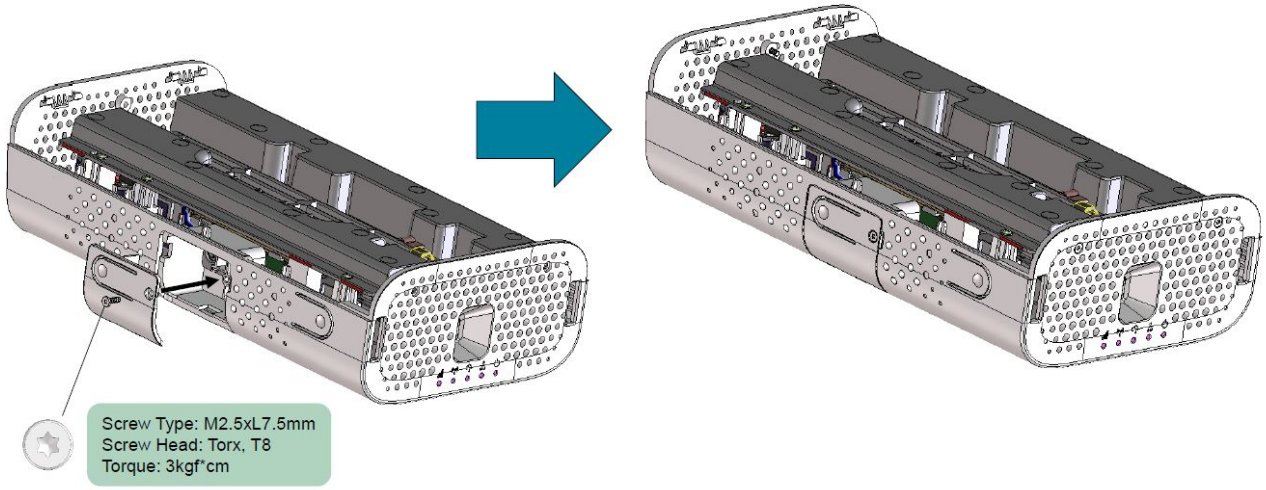
- Release 4screws to remove ODU IO Cover.



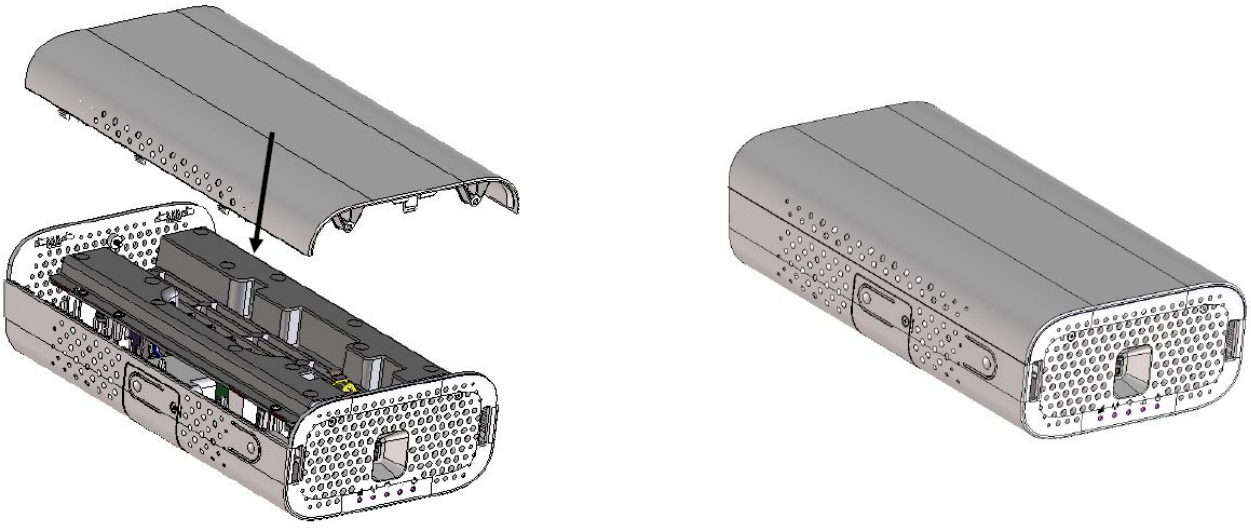
- Remove thermal jelly.



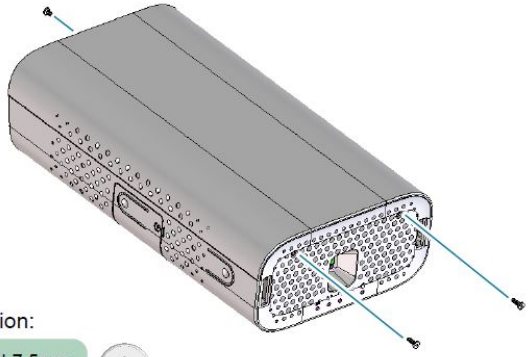
- Assemble the IO Cover back.



- Assemble the IO Cover back.



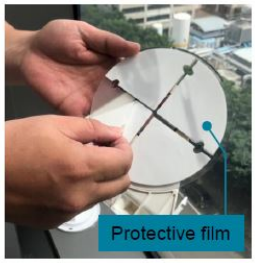
- Tighten 3pcs M2.5 screw for cover.

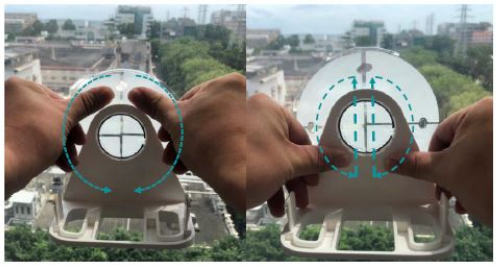


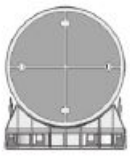
- Screw information:

Screw Type: M2.5xL7.5mm
Screw Head: Torx, T8
Torque: 3kgf*cm

IDU Bracket for Wall Mount

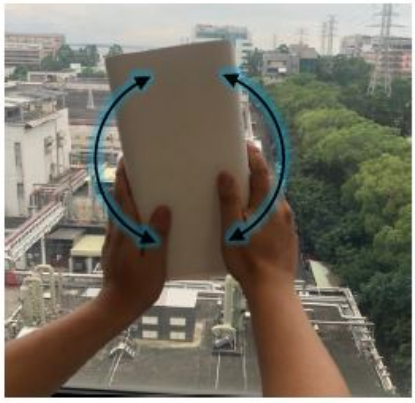






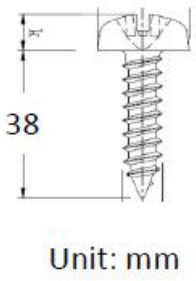
Gecko tape

1. Clean the heavy stain/dust on window by window cleaner.
2. Clean immediate area where mount will be attached to, use provided alcohol wipes to remove light dirt and the film left from window cleaner.
3. Peel off protective film from the Gecko tape on the indoor bracket. Then affix the indoor bracket on the window in the direction indicated by the arrow on the bracket.
4. Using both two thumbs to exert solid pressure holistically for 30 seconds in all areas where Gecko tape makes contact with the glass. If possible, check adhesion area by looking from the outside.
5. The lazy Susan feature can be used to adjust position of Indoor Bracket.



6. Once the bracket is securely affixed on the window, align the bracket slot on the IDU and insert it downward to the bracket arm.
7. Push the IDU into the indoor bracket until a “click” sound is heard.
8. Adjust the orientation of the Verizon Receiver as required.

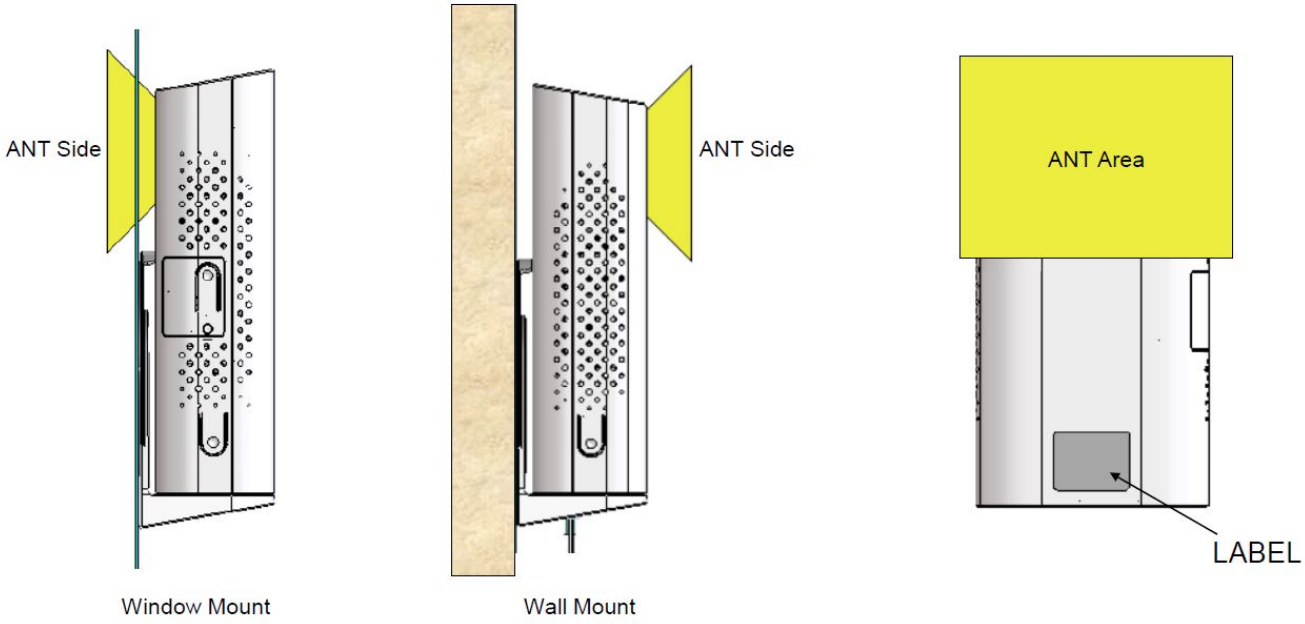
1. Do not peel off the protective film on the tape side.
2. User a pen to mark where to drill holes.
3. Use driller to drill two holes. (Notice that ashes need to be cleaned)
4. Insert the Wall anchor into the wall.
5. Screw fix the Bracket on the wall.



Wall mount screw Type: M3.5

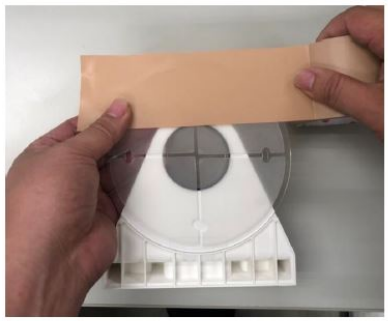
Screw head: Phillips

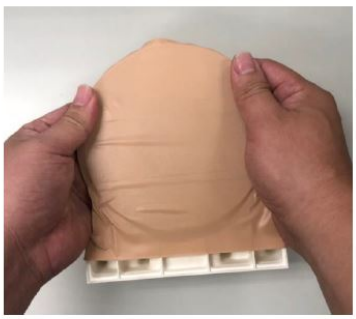
IDU Bracket Position



IDU Gecko Tape Preserving/Re-Attaching Process

Gecko Tape Plate Removing and Preserving Process

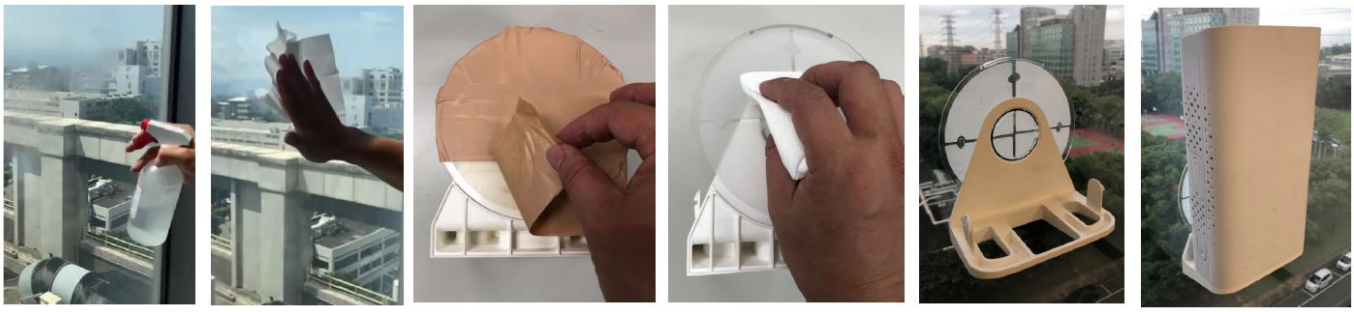




Step1.
Peel gecko tape plate off from the top rib (Peel it slowly to avoid deformation/ravage)
Step2.
Attach tape* to cover gecko tape completely. (this step is to make sure the gecko tape surface will not get dirt)

*WNC has tried these 3 types of tape for aging test, all of these could be used, and would not ravage the micro fiber structure on Gecko Tape.

Gecko Tape Plate Re-attach Process



- **Step1.**
  Use Alcohol (pad) to clean the window
- **Step2.**
  Slowly remove the tape*
- **Step3.**
  Use another tape* to clean surface dirt again
- **Step4.**
  Attach the gecko tape plate completely
- **Step5.**
  Install the CPE

Documents / Resources

	Wistron NeWeb Stark ODU/IDU Fixed Wireless [pdf] Installation Guide Stark ODU IDU Fixed Wireless, Stark ODU IDU, Fixed Wireless, Wireless

References

- kgf.cm - kgf Resources and Information.