

Installation instruction

0.9m Antenna



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Tools required

- ✓ Allen key 3 mm; for M4.
- ✓ Combination wrench (ring/open jaw) for Hex 15 & 16 mm; for M10.
- ✓ Socket wrench and sockets for Hex 15 & 16mm; for M10.
- ✓ Tool for torque levels; 2.6 Nm and 49 Nm.

Unpacking

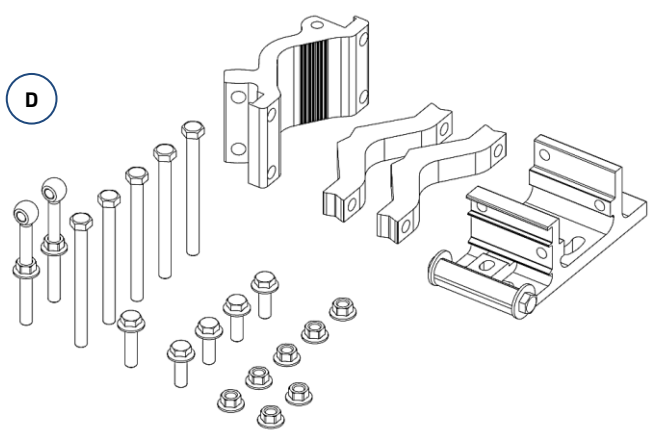
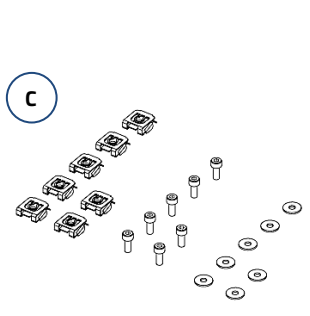
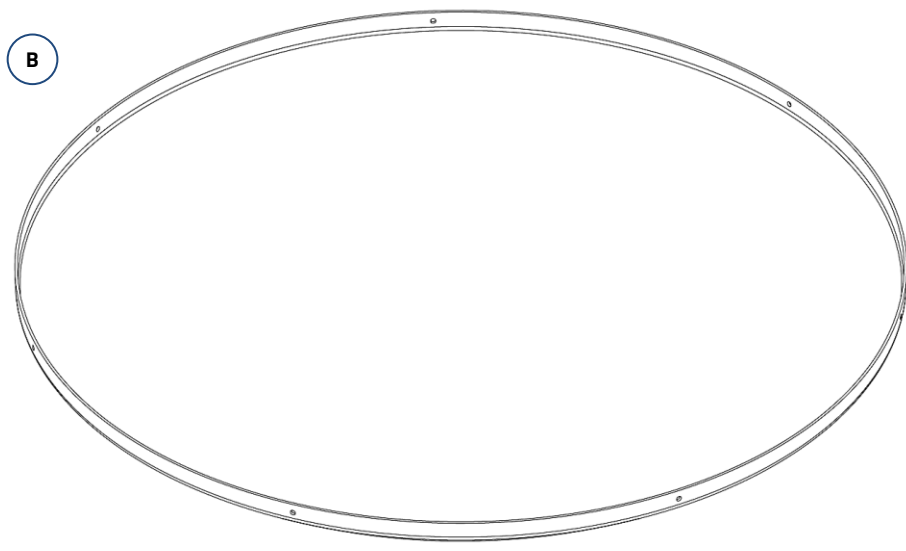
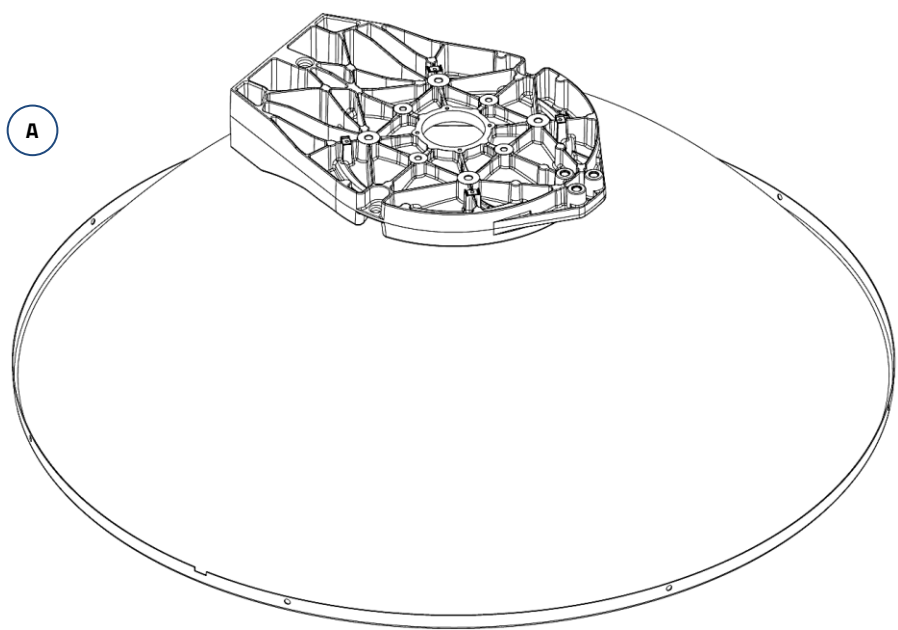
Antennas equipped with a flat radome should be placed on a flat clean surface during assembly, such as on top of the packing material. When equipped with a spherical radome, it might help to stabilize the antenna during installation, by placing it on top of a suitable packaging insert/box.



Handle Antenna carefully at all times.

Included parts

Item	Qty	Description
A	1	Antenna
B	1	Spherical radome (only 26-38GHz)
C	1	Fasteners (bag) (only 26-38GHz)
	7	M4 clip
	7	M4x10 screw
	7	Washer M4
D	1	Antenna support (Box)
	1	Pipe attachment bracket
	2	Clamp bracket
	1	Pivot bracket
	2	M10 link screw (and M10 flange nut)
	5	M10x120 screw
	1	M10x40 screw with flange
	4	M10x30 screw with flange
	7	M10 flange nut



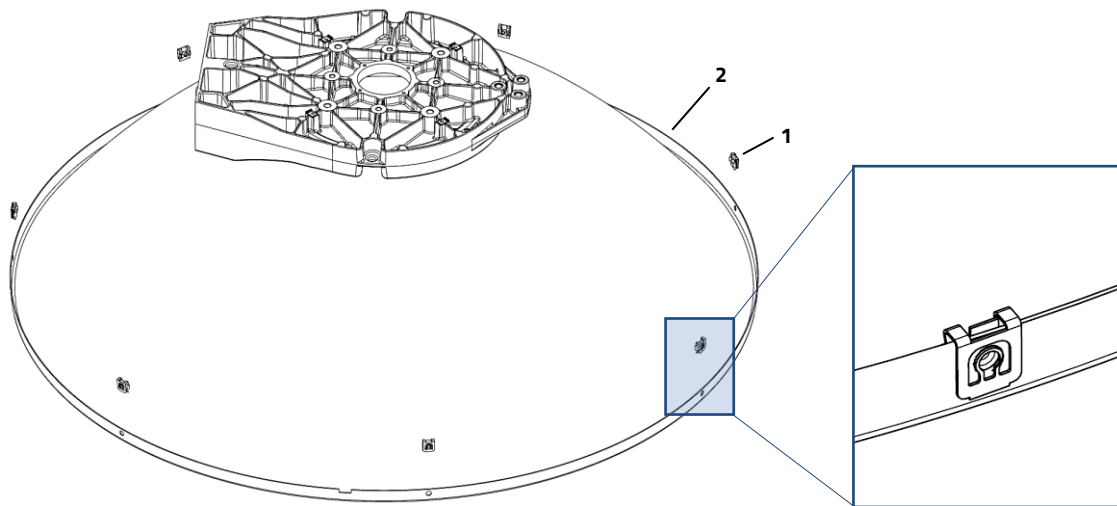
Assembly

Step 1 – Spherical radome (26-38GHz only)

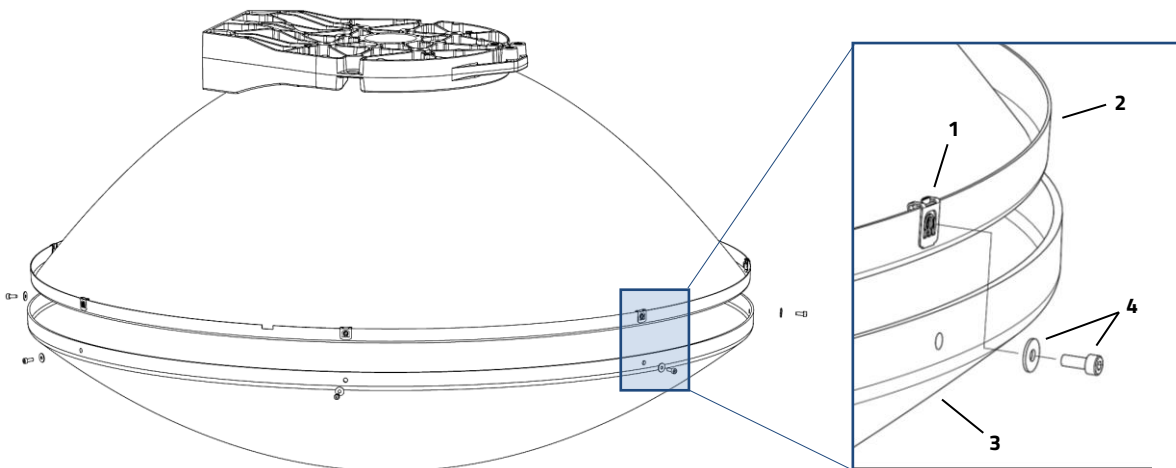
For frequencies 6-23GHz, skip Step 1 and go directly to Step 2.

For frequencies 26-38GHz, proceed with Step 1a-1d.

- a) Mount 7pcs M4 Clip (**1**) to Reflector (**2**).



- b) Position Spherical radom (**3**) with convex side pointing downward.
c) Place Reflector (**2**) onto Spherical radom (**3**) and align the edge holes on both parts with each other.
d) Assemble the parts (**2**) (**3**) using already mounted 7pcs M4 Clip (**1**) and 7pcs M4 screw / 7pcs Washer M4 (**4**). Tighten screws to torque of $2.6 \text{ Nm} \pm 5\%$.

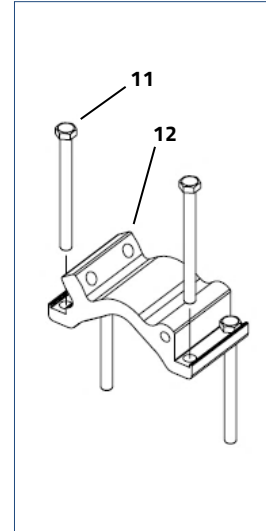
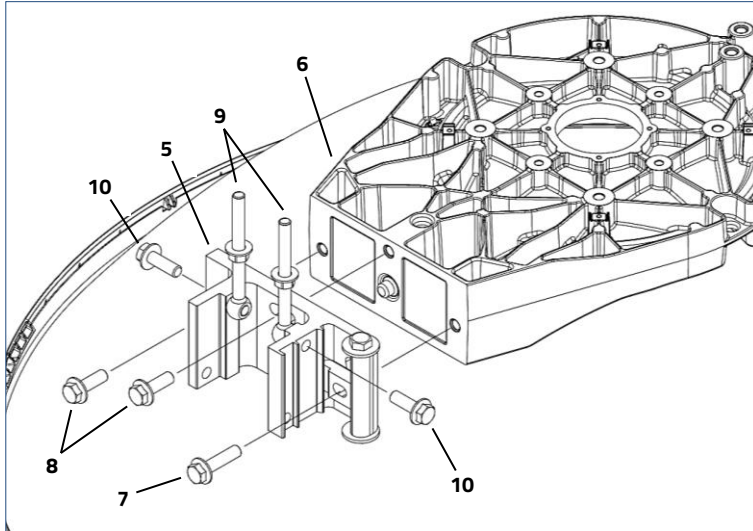


Step 2 – Radio unique installation

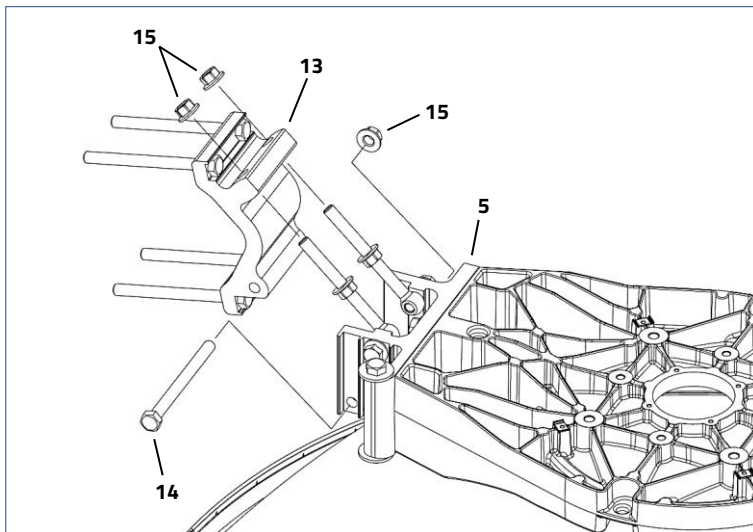
For assembling of radio interfaces; see radio unique installation instruction.

Step 3 – Antenna support

- Mount Pivot bracket (**5**) to Antenna (**6**) using 1pcs M10x40 screw (**7**) and 2pcs M10x30 screw (**8**). Fit screws finger tight.
- Mount 2pcs M10 link screw (**9**) to Pivot bracket (**5**) using 1+1pcs M10x30 screw (**10**). Fit screws loosely.
- Mount 4pcs M10x120 screw (**11**) to Pipe attachment bracket (**12**).



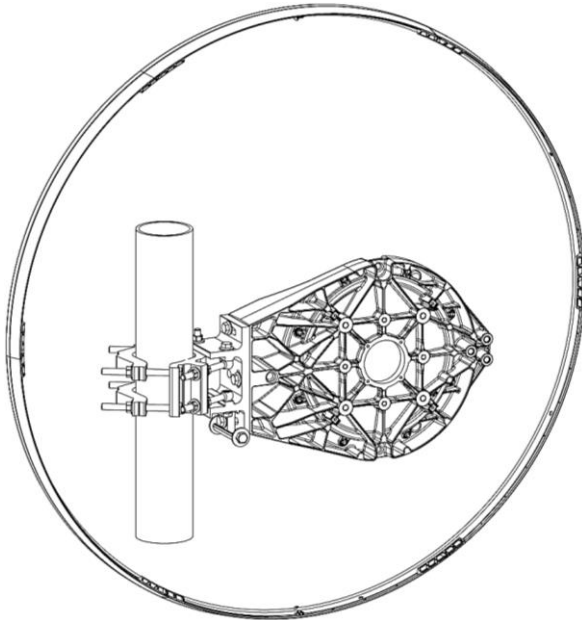
- Mount Pipe attachment bracket (**13**) to Pivot bracket (**5**) using 1pcs M10x120 screw (**14**) and 1+2pcs M10 flange nut (**15**). Fit screw and nuts loosely.



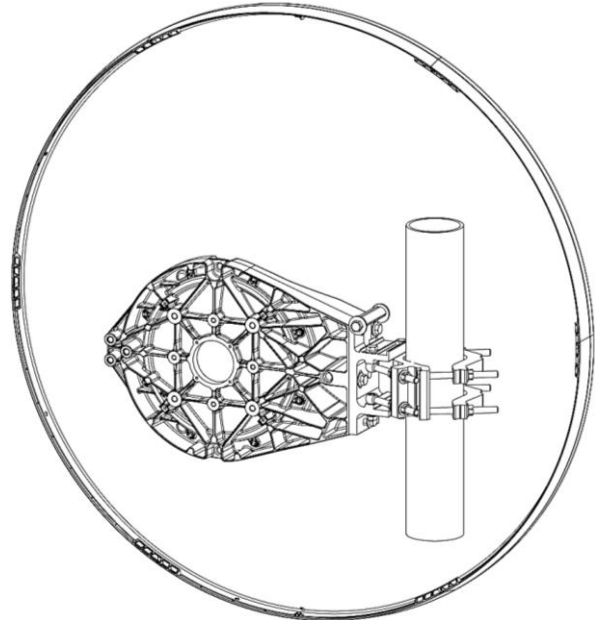
Installation

Left or Right side installation

For a left side installation, turn the antenna 180° and mount it upside down. CAUTION: This may require to also rotating the radio interface, see "Assembly: Step 2 – Radio unique installation".



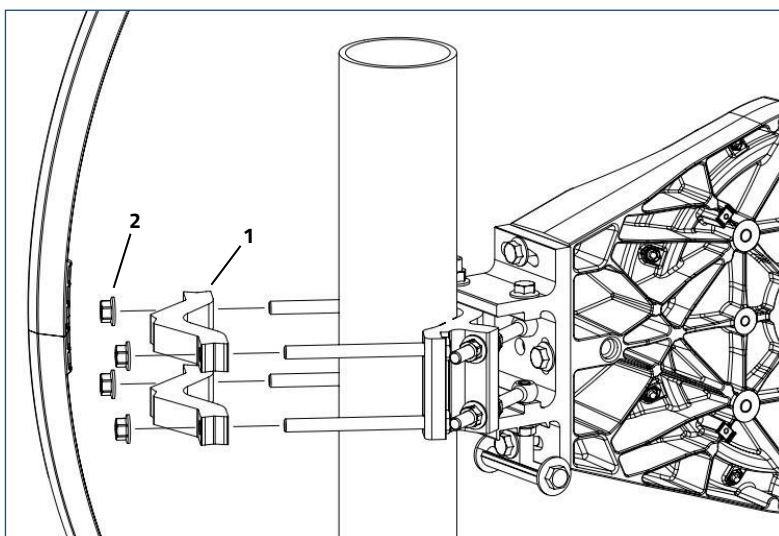
Right side installation



Left side installation

Tower pipe compatibility: Ø50- Ø120mm

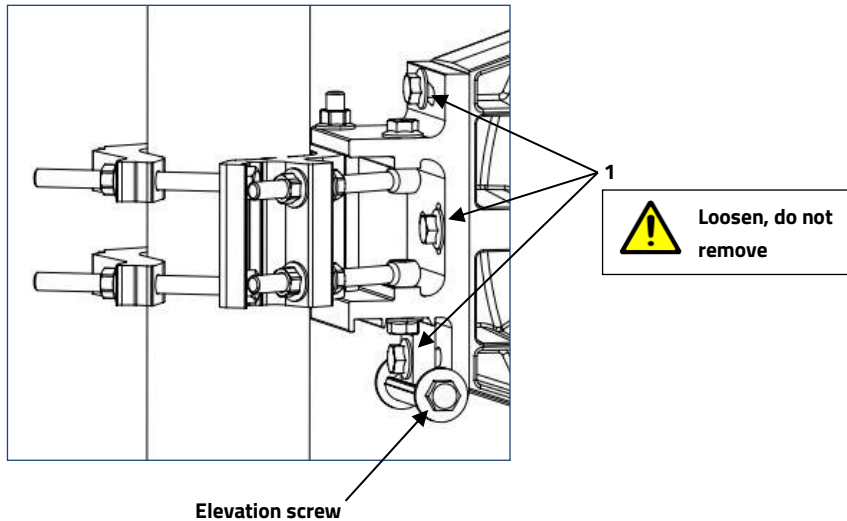
- Hoist and secure antenna to pipe structure using 2pcs Clamp bracket (**1**) and 4pcs M10 flange nut (**2**).
- Position the antenna so it will point along the radio link path and then tighten nuts to torque of 49Nm \pm 5%.



Antenna alignment

Elevation adjustment

- Ensure 3pcs M10 screw (**1**) are slightly loose.
- Rotate **Elevation screw** to adjust direction $\pm 15^\circ$.
- On completion tighten screws to torque of $49\text{Nm} \pm 5\%$.



Azimuth adjustment

- Ensure 5pcs M10 nut (**2**) (**3**) and 2pcs M10 screws (**4**) are slightly loose.
- Move M10 nuts (**2**) along **Azimuth screws** to adjust direction $\pm 15^\circ$.
- On completion tighten all nuts and screws to torque of $49\text{Nm} \pm 5\%$.

