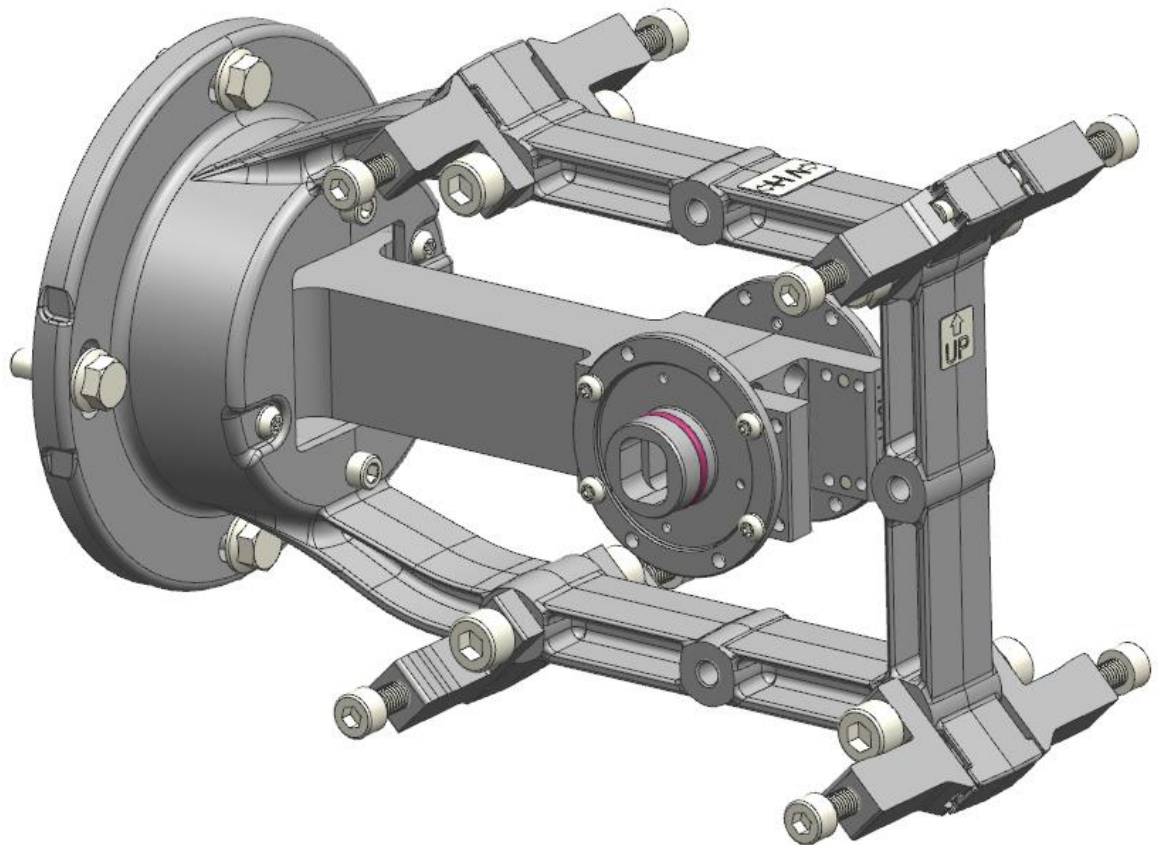


Installation instruction

LEAX-RAy Antennas – Dual polarization



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Tools required

- ✓ Allen key 3, 5, 6 and 8mm; for M4, M6, M8 and M10.
- ✓ Combination wrench (ring/open jaw) for Hex 13mm; for M8.
- ✓ Tool for torque levels; 2.7Nm, 7Nm, 17Nm, 24Nm and 33Nm.

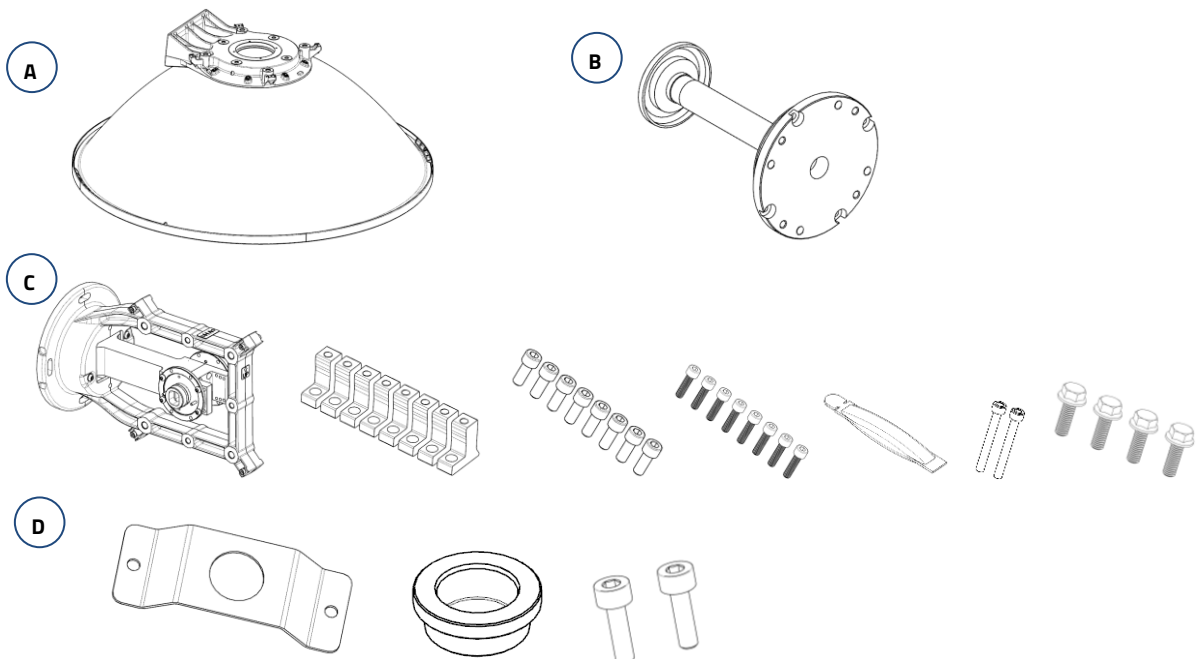
Unpacking

Place antenna on an appropriate surface, such as on top of packing material. For 0,6m 24-42GHz there is a special inlay with circular holes that can be used to place the radome in, to stabilize the antenna when assembling. Before starting with the installation, make sure not to forget to remove any protection tapes, covering the different waveguide openings.

Included parts



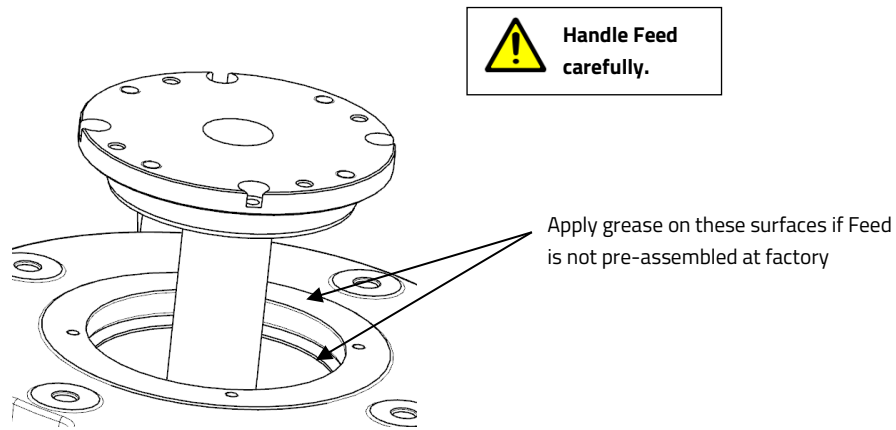
Item	Qty	Description
A	1	Antenna (including mast mount)
B	1	Feed (if not pre-assembled to antenna)
C	1	OMT kit
	1	OMT
	8	Adapter plate spacer
	8	Screw M10x25
	8	Screw M8x30
	1	Grease
	2	Screw M6x50
	4	Screw M8x25
D	1	IPL Lid kit (optional)
	1	Pressure plate
	1	IPL Lid
	2	Screw M8x16



Assembly

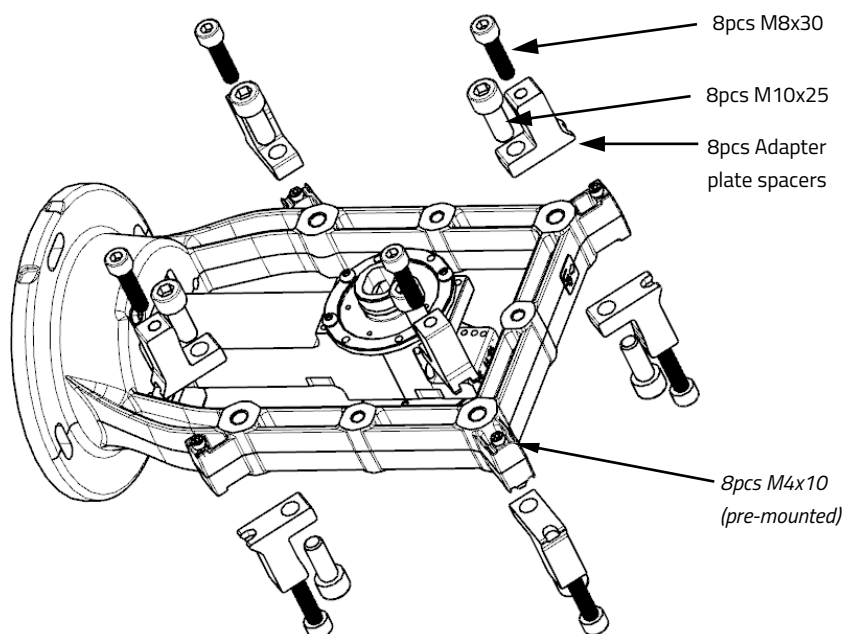
Step 1 – Feed

- a) If Feed is pre-mounted to antenna at factory;
 - ✓ Remove 2pcs M4x10 (Allen) screws from Feed and scrap them.
 - ✓ The grease is applied at factory.
 - ✓ Remove protection tape from Feed.
- b) If Feed is not pre-mounted to antenna at factory;
 - ✓ Apply grease on surfaces where Antenna and Feed will turn against each other.
 - ✓ Place Feed into antenna.
 - ✓ Remove protection tape from Feed.



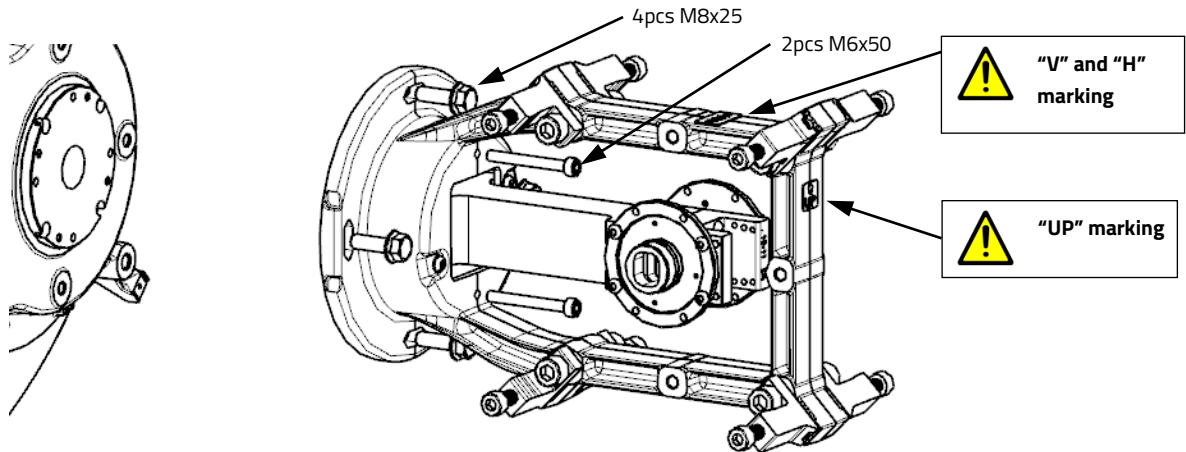
Step 2 – OMT

- a) 8pcs M4x10 Allen screws are pre-mounted to Antenna, identify them.
- b) Mount 8pcs Adapter plate spacers with 8pcs M10x25 Allen screws. Check that the Adapter plate distances are guided by the 8pcs M4x10 screws. Tighten the M10 screws with 33Nm \pm 5%.
- c) Mount 8pcs M8x30 Allen screws by hand, approximately 10mm down into Adapter plate spacers. Used for mounting of Radio.



Step 3 – OMT on antenna

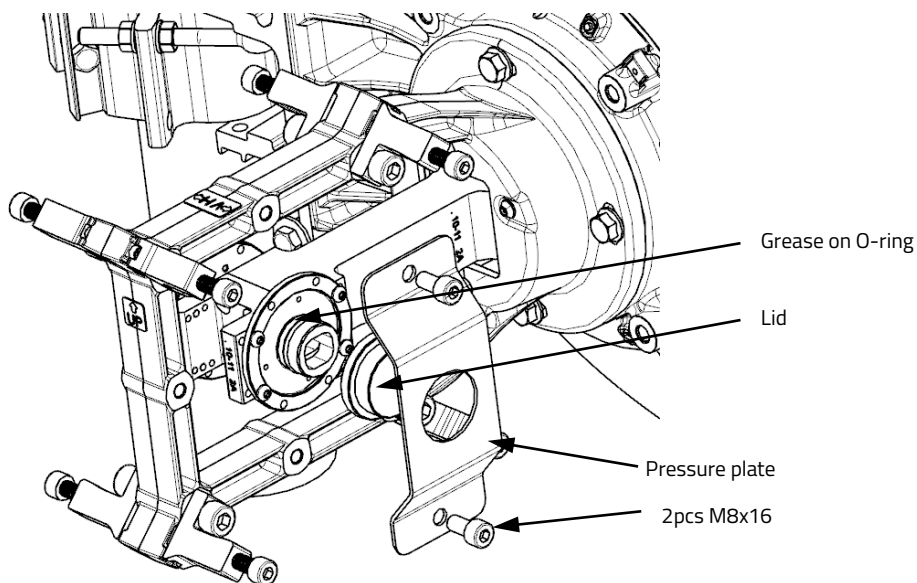
- Remove 1pc protection tape on OMT (on the surface that is facing the antenna).
- Define which way is up on the antenna and turn OMT accordingly.
- Place OMT against Feed. Check that guide pins in OMT are properly inserted in guide pin holes in Feed, mount 2pcs M6x50 (Allen) and tighten them by hand.
- Mount 4pcs M8x25 (Hex) Polarization screws, through OMT, into Antenna and tighten them with $24\text{Nm}\pm 5\%$.
- Tighten the 2pcs of screws M6x50 (Allen) with $7\text{Nm}\pm 5\%$



Step 4 – IPL Lid kit (optional)

If only one radio shall be mounted an optional Lid shall be mounted on the opposite side of OMT.

- Remove protection tape (1pcs) from OMT interface plate.
- Put grease on the O-ring – all around.
- Mount Lid all the way to the bottom by hand.
- Mount Pressure plate with 2pcs M8x16 Screws (Allen) and tighten with $17\text{Nm}\pm 5\%$.



Step 5 - Antenna and Radio equipment

- a) Continue mounting the antenna according to antenna manual.
- b) Remove protection tape from Waveguide interface on OMT and mount Radio equipment.

Antenna Alignment

Polarization adjustment

For Azimuth and Elevation adjustment see antenna manual.

- a) Slightly loosen 4pcs of M8x25 (Hex) Polarization screws.
- b) Adjust polarization by turning OMT $\pm 5^\circ$.
- c) Tighten the Polarization screws (4pcs) with 24Nm $\pm 5\%$.

