Ericsson

Users Manual

Applicant: Ericsson (China)

For Original Filing:

FCC: X3V1900RRUC
IC: 287AJ-1900RRUC

Installation procedure for the
CDMA Remote Radio Unit (RRUC)

CPC N0213009

Install the CDMA Remote Radio Unit (RRUC) using the instructions in this card.

⚠ RF exposure
The antenna must be installed at a minimum distance of 4.25 meters from any human exposure to comply with RF exposure limits.

Connect ground leads first
Connect the frame ground leads before any other leads.

Work with assistance

Requirements checklist

System:
- ☐ Lock the Base Station (contact the Base Station administrator).
- ☐ Disconnect the Base Station power.

Site preparation:
- ☐ Locate and position the RRUC on wall, floor, roof or pole.
- ☐ Provide or arrange access portals for cabling.
- ☐ Provide protective covering or conduit for RF cabling.
- ☐ (Optional) Install customer supplied DC surge protector for power cable.

Packaging and contents
- ☐ RRUC unit in cardboard shell.
- ☐ Fiber optic cable (with dust caps) cable engineered for the site.
- ☐ DC power cable (site engineered and packaged separately).
- ☐ Duplexer
- ☐ Mounting brackets and template
- ☐ SFP module
- ☐ (Optional) Solar shield

Tools and materials:

- ✔ Hammer drill kit, anchoring tools
- ✔ Torque wrench (torque to 25 N-m)
- ✔ Antistatic wrist strap
- ✔ Torx screwdriver set
- ✔ Hex wrench (Allen key) set
- ✔ 3M fiber cleaning solution
- ✔ #6 AWG ground cable
- ✔ Swabs, cleaner for optic cable
- ✔ Weatherproofing for RF cables

Installation options

Install the RRUC within 40 km of the antennas.
Decide on a wall, floor, roof or pole installation.

Option

Install RRUC onto a wall

Install the RRUC onto a concrete or stud wall.

1. Position template on the wall.
2. Drill holes for anchor bolts/screws.
3. Place bracket in position.
4. Insert anchor bolts (3/16" x 1.25") /screws (6mm x 50mm) into the four holes and tighten.
5. Secure the RRUC onto bracket (see next page).

10 in

13 in
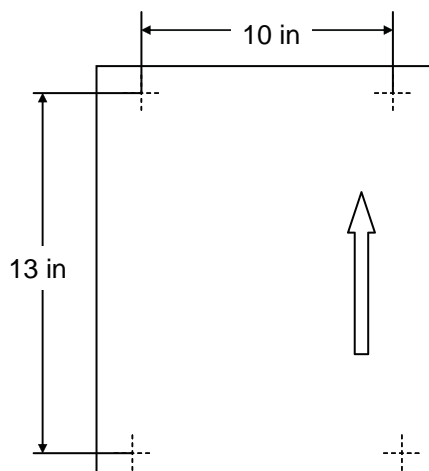
Locations for four wall mount holes in inches

Install RRUC onto floor

Install the RRUC onto the floor.
1. Position template on floor.
2. Drill holes in floor for M12 anchor bolts.
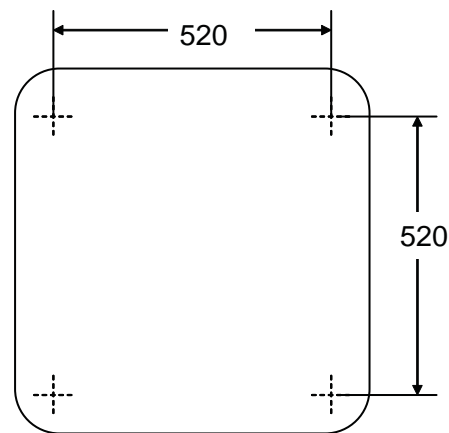3. Place floor stand in position.
4. Insert bolts into four holes and tighten.
5. Determine mounting bracket location.
6. Attach upper clamp and lower clamp.
7. Tighten fasteners.
8. Secure RRUC onto bracket.

Install RRUC onto roof

Install the RRUC onto a roof.
1. Place roof stand in position.
2. Extend base legs to stabilize the stand.
3. Place 50 lb./23 kg weights over each leg.
4. Determine mounting bracket location.
5. Attach upper clamp and lower clamp.
6. Tighten fasteners.
7. Secure RRUC onto bracket.
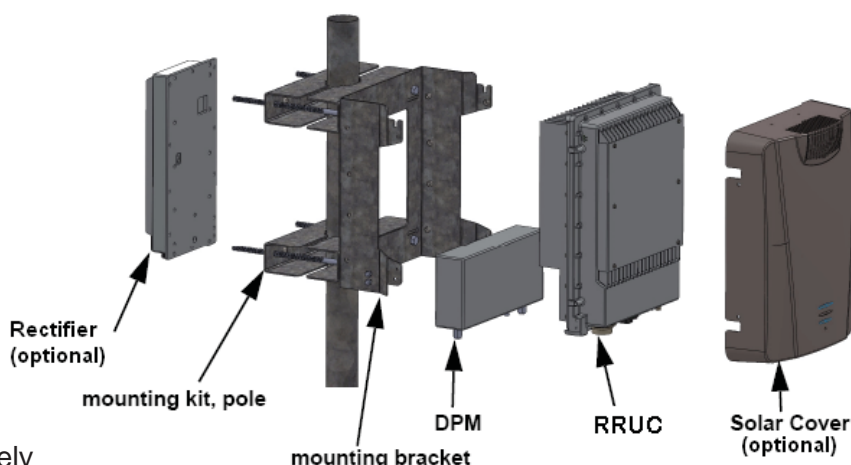
Install RRUC onto a pole

Install the RRUC onto a pole.
1. Determine mounting location.
2. Position mounting bracket.
3. Attach upper clamp and lower clamp.
4. Tighten fasteners.
5. Secure RRUC onto bracket.

Secure RRUC onto bracket

Position the RRUC onto the bracket and secure.

1. Install DPM into RRUC unit.
2. Install four upper screws and washers loosely into the RRUC unit.
3. Lift the unit onto bracket and set upper screws onto slots in the bracket.
4. Insert the four lower screws and washers and tighten.
5. Tighten the upper screws.
6. If required, attach solar cover over RRUC.
7. Install cables between the DPM and the RRUC.

Locations for four floor/roof mount holes
(in millimeters)

520

520

Rectifier (optional)

mounting kit, pole

DPM

RRUC

Solar Cover (optional)

mounting bracket

Install ground cable

Install a ground cable between the mounting bracket and a building ground.
1. Locate a suitable ground point on the wall or pole.
2. Install a grounding lug or screw.
3. Install a ground cable between the ground point and ground screws on mounting bracket using a two-hole lug.

Install RF cables

Install two RF cables between the RRUC and the antenna.
1. Install N-type connectors on the RRUC cable ends.
2. Install suitable connectors on the antenna end, attach and tighten.
3. Attach the RRUC cable for the Main antenna to the left connector and tighten.
4. Attach the RRUC cable for the Diversity antenna to the right connector and tighten.

Install the optical cable

Install optical cable between the RRUC and the Base Station.
1. Label the cable by its sector name (for example, Alpha0).
2. Route optical cable from the Base Station to the RRUC.
3. Remove the connector dust cap.
4. Gently clean the ferrule using cotton tip with alcohol wipe.
5. Connect immediately to the RRUC connector.

Install the power cable

Install power cable between the RRUC and the Base Station.
1. Route power cable from the RRUC to the DC surge protectors in the building.
2. Attach the power connector to the RRUC.

Install protective coverings

Obtain and install protective coverings and strapping for all exposed cable.
Apply weatherproofing material to all RF cables.

Contact Base Station personnel to connect the power and optical cables to the Base Station and configure the RRUC installation.