



# **Cedar AAN1F-NC8 User Manual**

Version: 01

Update date: Nov. 15, 2023



## Copyright

Copyright © 2023 COMPAL ELECTRONICS, INC. All rights reserved.

Without the prior written permission of the copyright holder, any company or individual is prohibited to excerpt, copy any part of or the entire document, or distribute the document in any form.

## Notice

The document is subject to update from time to time owing to the product version upgrade or other reasons. Unless otherwise specified, the document only serves as the user guide. All the statements, information and suggestions contained in the document do not constitute any explicit or implicit guarantee.



Version	Date	Major Change
01	Nov 15,2023	Initial Version

Confidential



## Content

1. Overview.....	5
1.1 Introduction.....	5
1.2 Specification.....	5
2. Application Interface (HW/Ant/SW).....	6
3. ME Mechanical Specification.....	7
4. Packing Mechanical Specification.....	8
5. Application Block diagram.....	9
6.Wall Mount Bracket Installation Manual.....	10
7. Legal Information.....	13



## 1 Overview

### 1.1 Introduction

Small Cell (Cedar) is Integrated small Cell, and it is include CU/DU/RU.

### 1.2 Specification

AIO - CU/DU/RU	
3GPP Standard	R15
RAT Mode	5G SA, Option 2
Platform	NXP LX2160A + NXP LA123X
SU-MIMO	DL: 4 layers, UL: 2 layers (4T2R);
Modulation	DL: QPSK/16QAM/64QAM/256QAM, UL: QPSK/16QAM/64QAM
Interface	10Gbps Copper(RJ45) x1, Optical (SFP+) x1
Capacity	64 active UEs
Throughput	DL 1.2 Gbps (7DS2U); UL: 400 Mbps (DSUU)
Duplex mode	TDD (7D1S2U, DSUU, DDDSUDDSUU)
Frequency band	N48
Bandwidth	100MHz Maximum
Antenna	4T4R, Internal
Max. transmit power	250mW (24dBm) per channel
Dimensions	310 x 265 x 95 mm
Weight	5 kg
Power supply	12V DC adaptor (85~264VAC input)



## 2 Application Interface (HW/Ant/SW)



SFP+

Fiber

10G

Management Port

10G

Data Port

DC Jack

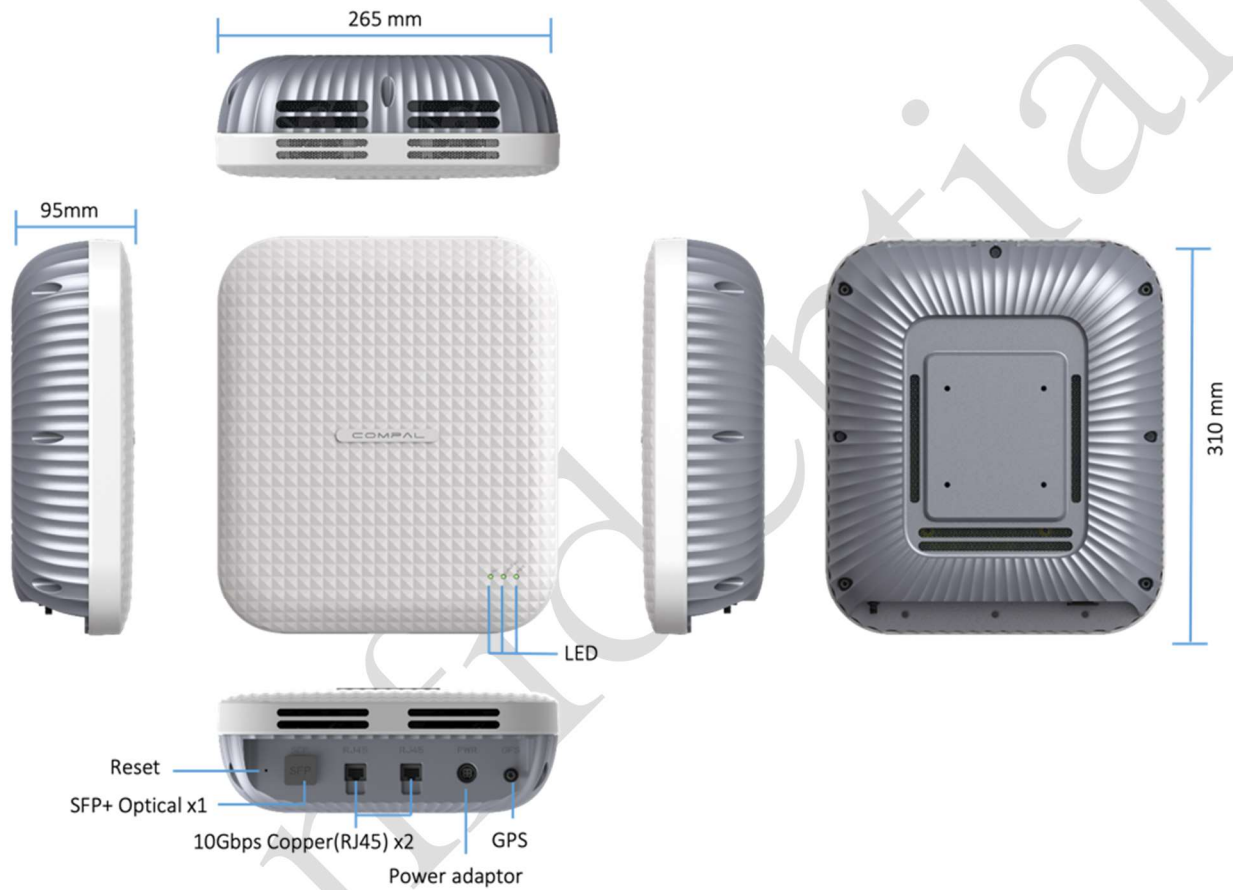
12V Adapter

GPS Antenna  
ConnectorConnector Active GPS Antenna  
And the connector type is SMA



### 3 ME Mechanical Specification

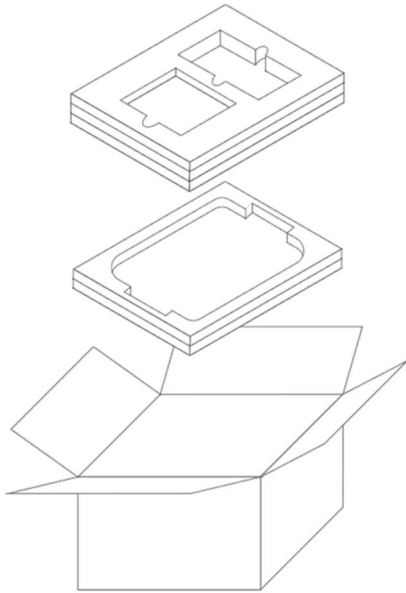
#### ● Configuration





## 4 Packing Mechanical Specification

### ● Packing Structure



**Step01**  
Wrapped the device with foam,  
then place it well into the EPE.



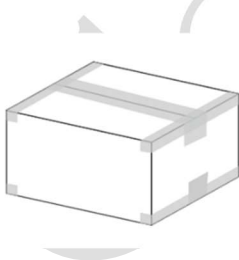
**Step02**  
Put the accessories in the right place.



**Step03**  
Put the EPE with device in the carton first.



**Step04**  
Then put the EPE with accessories on the  
top of carton.



**Step05**  
H-sealing.



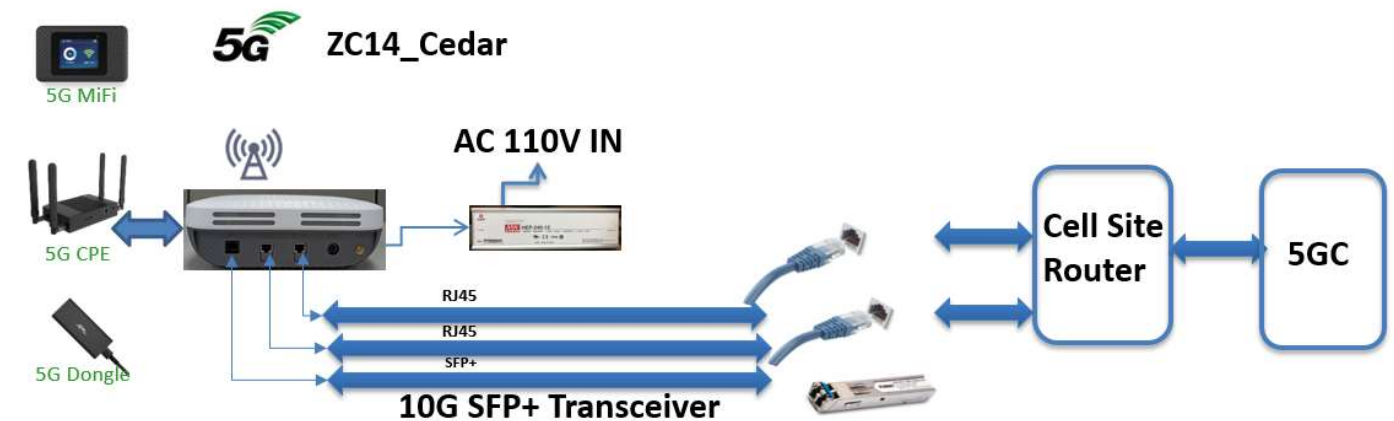


## 5 Application Block diagram

The device is use for small cell 5G application as below as

### 5-1 Application Description

- A. Use small cell to connection 5GC Server and provide networking for 5G signal
- B. Small Cell is adapter 4T4R structure and RF power is 250mW/per path.
- C. RJ45\*1 or SFP+\*1 for Data link;
- D. RJ45\*1 for management port/Debug use.

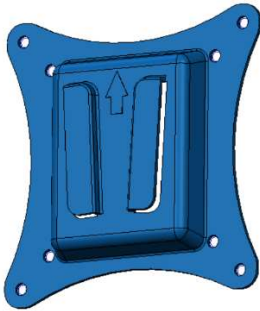




## 6 Wall Mount Bracket Installation Manual

### ● Materials

**Bracket-A**

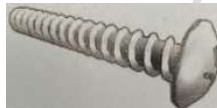


**Screw-A**



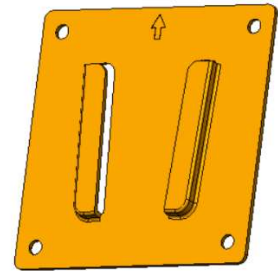
M4 x 10/14mm

**Screw-B**



Ø5 x 37mm

**Bracket-B**



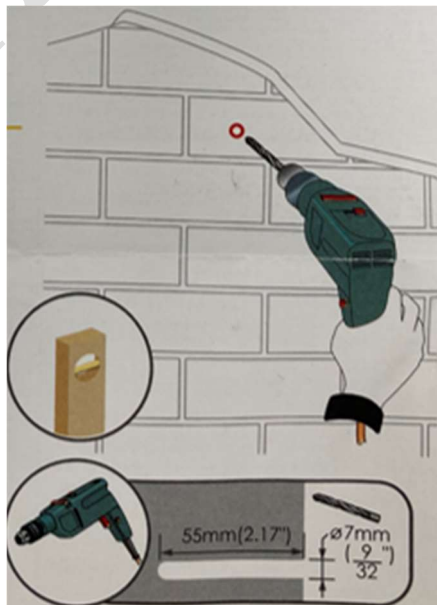
**Plastic anchor**



36mm

### ● Masonry Walls or Cement Walls

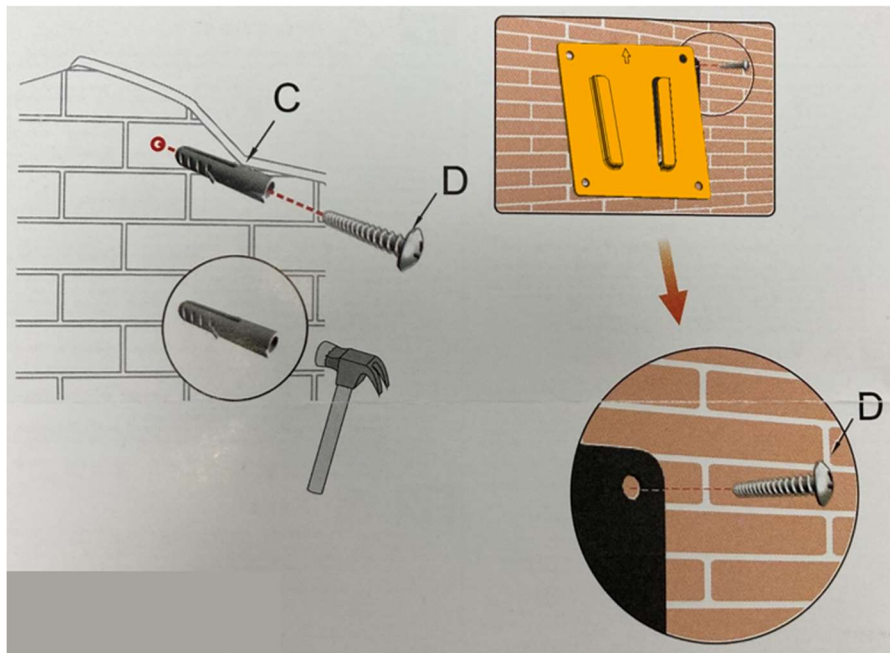
#### 6- Drill holes in the wall.





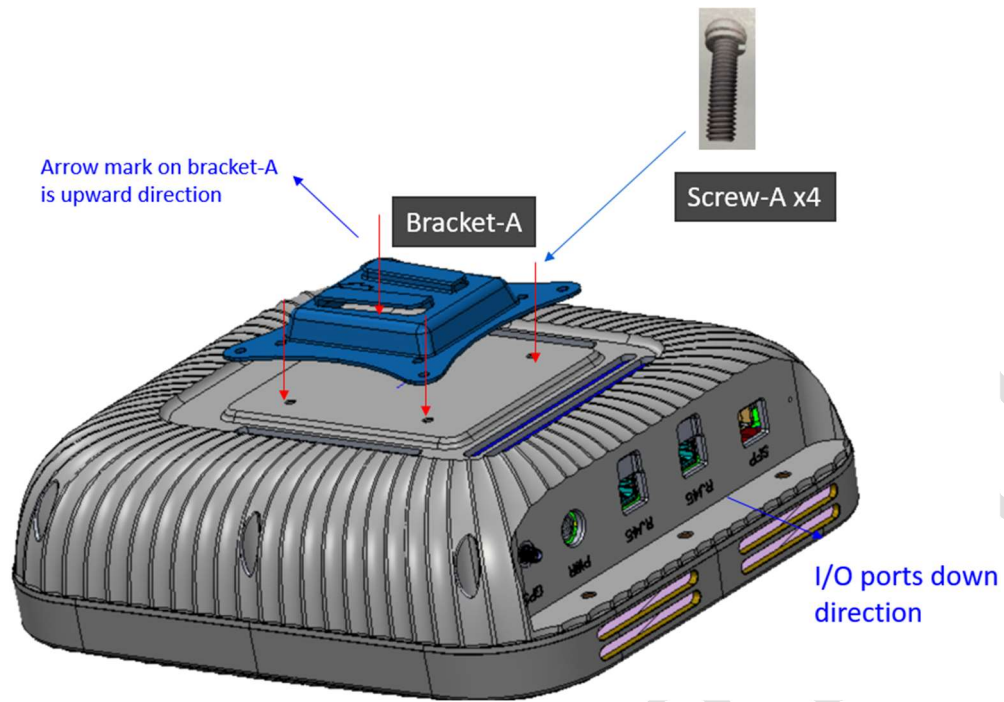
**Step. 2** Insert plastic anchors into the holes in the wall.

**Step. 3** Insert Screw-B through Bracket-B into plastic anchors.

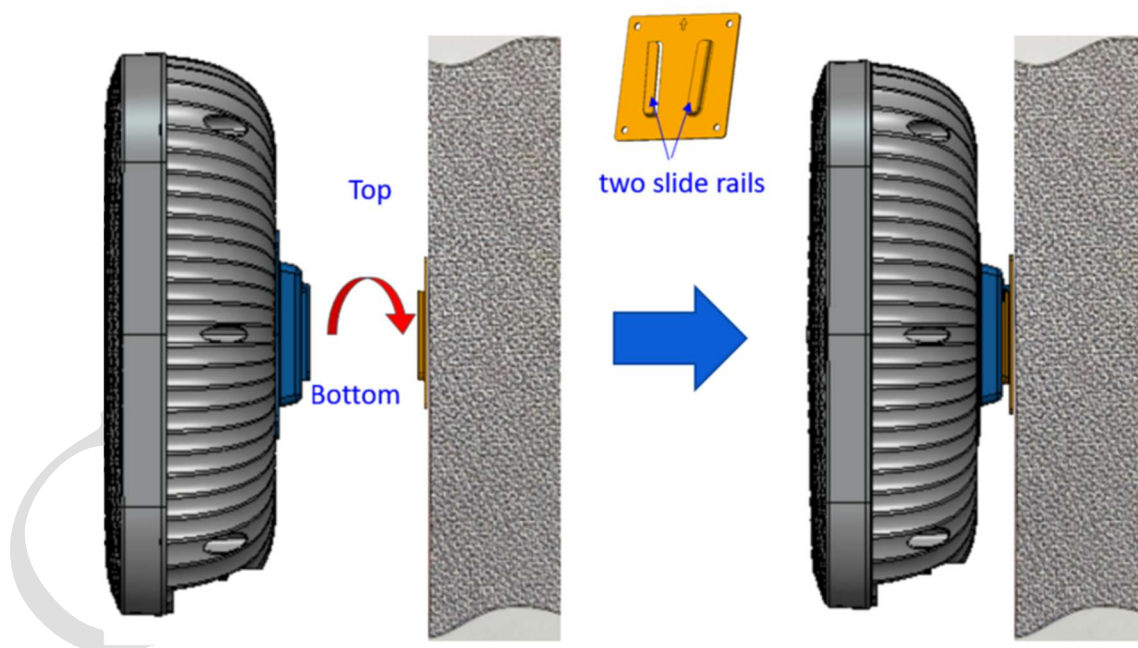


**Step. 4** Put the Bracket-A on the device and fixed by four screws.

**Note:** Assuming I/O ports facing down.



**Step. 5 Put Bracket-A into bracket-B two slide rails from top to bottom.**





## 7 Legal Information

### 7.1 Warning Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

This equipment should be installed and operated with minimum distance 20cm between the radio & your body.



### 7.1.1 RF Exposure Information

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

Confidential