

ECL2248-2723

Installation Manual

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Revision History

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Preface

Purpose of the Manual

This document provides basic installation guide for ECL2248-2723 system, a base station in LTE system.

Amendments

The installation manual is being updated continuously in order to effectively reflect the actual system. However, there may be some minor differences due to the continued upgrades and modifications to the system. Please contact us to clarify any confusion arising from such differences.

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Caution and Other Marks



This Equipment complies with part 15.19 (a)(3) of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



The intentional or unintentional radiator of this equipment shall not be changed or modified without the approval of EUCAST.



NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and

used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



This equipment complies with FCC RF Radiation exposure limits set forth in an uncontrolled environment. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed to operate with a minimum distance of 10.2 cm between the radiator and the end-user's body.



Changes or modifications not expressly approved by EUCAST could void the user's authority to operate the equipment.

1 Introduction

1.1 System SPEC.

1.1.1 ECL2248-2723 Exterior

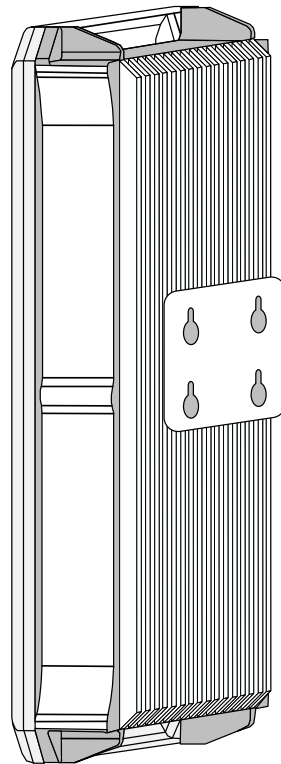


Figure 1. ECL2248-2723 Exterior

1.1.2 Electricity consumption.

ECL2248-2723 uses +12V DC Voltage.

The + 12V voltage supplied to the ECL2248-2723 is generated by an AC / DC adapter.

The AC/DC adapter output power is + 12V / 5A.

ITEM	Specification
Input Power Voltage	+12 VDC (Using AC/DC Adaptor)
Maximum Power Consumption	Typ. 40 Watts

Table 1.Electricity consumption

131

132 **1.1.3 Size and Weight**

ITEM	Specification
Size (mm)	188 x 272 x 55
Weight (Kg)	2.1Kg , Only Main Chassis

133

Table 2. Size and Weight

134

135 **1.1.4 Environmental condition**

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Section	Range	Standard
Operating Temperature	0 ~ 40°C	Indoor
Storage Temperature	-30 ~ 70°C	

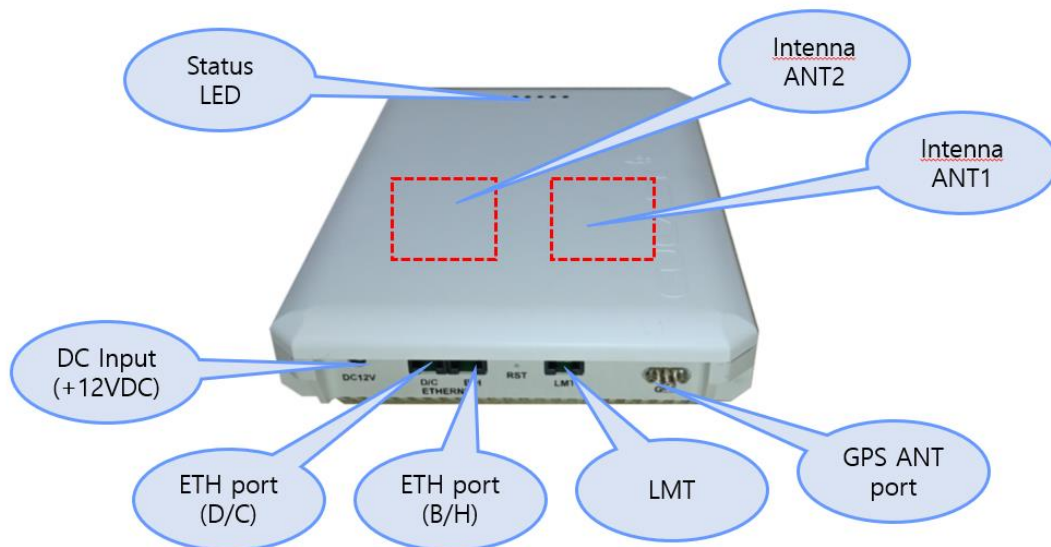
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Table 3. Environmental Requirements

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139 **1.1.5 Physical Interface**

140 **1.1.5.1 Interface Overview**



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Figure 2. Interface Ports

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- 1) RF Antenna : Inside the enclosure, ANT1/ANT2
- 2) Backhaul Port(RJ45) : It is used for connection with B / H and supports Ethernet (100/1000 Base-T)
- 3) Daisy-chain Port(RJ45) : It is used for connection with B / H another base station and supports Ethernet (100/1000 Base-T)
- 4) LMT Port(RJ45) : It is used for operation management in field and supports Ethernet (10 / 100Base-T)
- 5) GPS ANT(SMA Female) : It connects to GPS antenna. Support +5VDC for external GPS active antenna.
- 6) DC IN Port : This is +12VDC DC Power Input Port.
- 7) Status LED : System Status LED

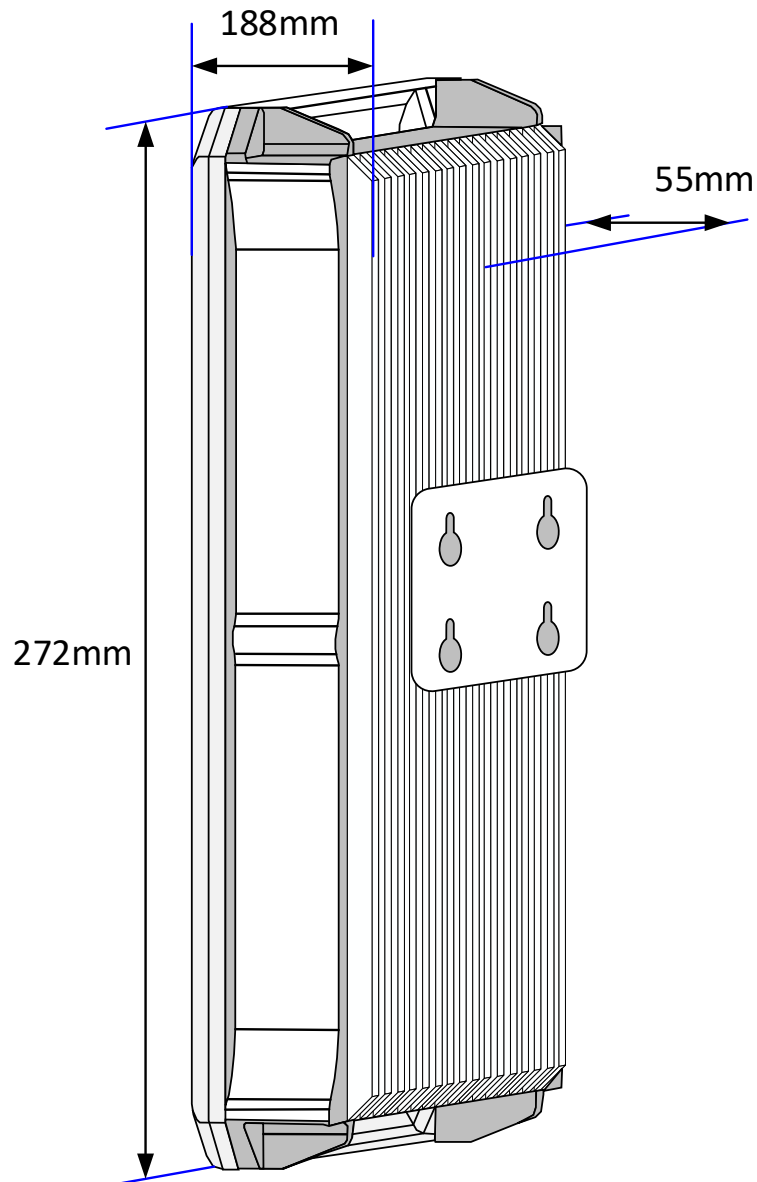
1.1.5.2 Detailed Definition of Interface

No	Name	Connector Type	To/From	Descriptions
1	DC IN	RAPC712X Jack	AC/DC adaptor	@+12 VDC Cable Side : Outer Diameter 5.5mm Inner diameter 2.5mm
2	ETH LMT	RJ45 receptacle	LMT	10/100Base-T Cable Side : RJ45 Plug
3	ETH B/H	RJ45 receptacle	Backhaul	10/100/1000Base-T Cable Side : RJ45 Plug
4	ETH D/A	RJ45 receptacle	Other BS B/H	10/100/1000Base-T Cable Side : RJ45 Plug
5	GPS	SMA(F)	GPS Antenna	GPS Ant Cable : SMA(M)

Table 4. Interface overview

163 2 Start installation

164 2.1 Installation and Workspace



165
166 **Figure 3. ECL2248-2723 Installation sample.**

167 The ECL2248-2723 is Wall Mount Type as shown in Figure 3. It is not a desk type. Considering
 168 the size and workspace of the ECL2248-2723, the minimum space to be secured is as follows.
 169 When mounting the ECL2248-2723 on a wall, make sure that there is enough space between the
 170 ceiling and floor. Because the circulation of air is lower than the outside, it is recommended to
 171 install in open space.

172

173

174 2.2 Survey of installation area

175 Installer must survey install area before installation

176 To investigate the site, You prepare drawing of the place where the system is installed, and carry
177 out preliminary inspection on the following matters

- 178 ● installation space and work space
- 179 ● Check the route and method of transporting the system to the installation location
- 180 ● Direction of equipment installation
- 181 ● Installation status of lighting equipment
- 182 ● External interface situation
- 183 ● Electrical capacity and wiring situation
- 184 ● Status of System Expansion
- 185 ● Location and wiring method of RF antenna and GPS antenna
- 186 ● Environment that affect safety of installer
- 187 ● Packaging waste disposal facility

188

189 2.3 Movement of equipment

190 When transporting carton box and materials, must be transported according to the method which
191 be displayed on packaging. Specially when it is displayed in the top and bottom, do not carry in
192 the reverse. It is necessary to minimize the occurrence of physical shocks during transportation.

193

3 System installation

3.1 ECL2248-2723 components



(a) ECL2248-2723 Main System



(b) AC/DC Adaptor



(c) Brackets(ECL2248-2723 side/Wall side)

Figure 4. Compositions of ECL2248-2723 Mechanical

3.2 ECL2248-2723 installation

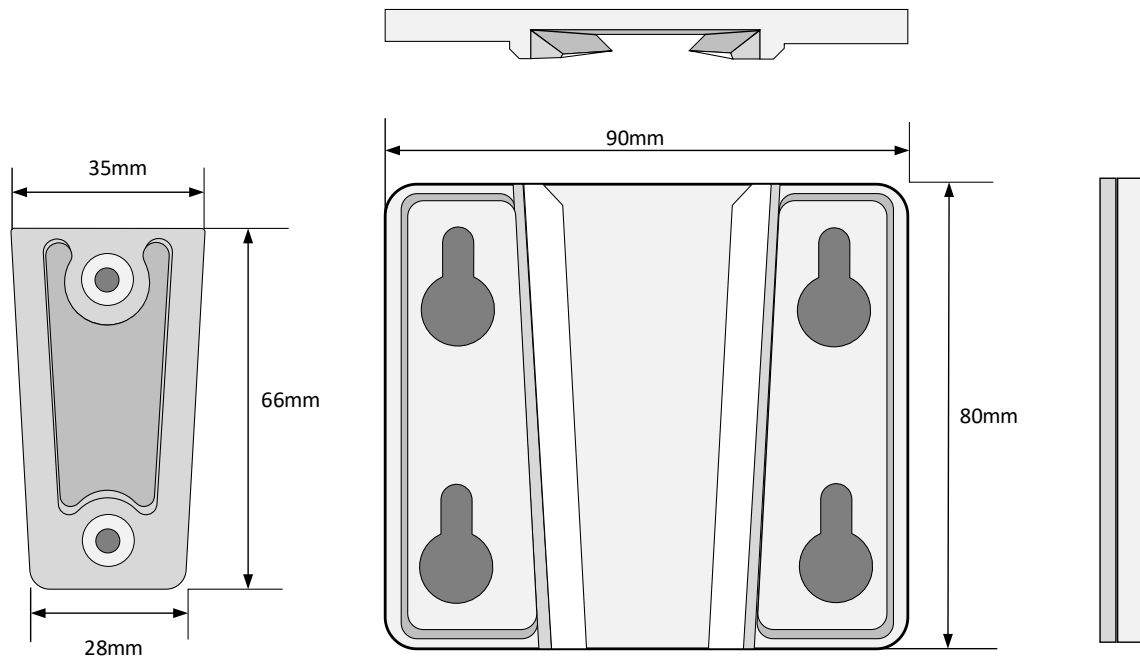
Bracket that can be installed in Wall are provided.

The procedure for installing the ECL2248-2723 is as follows (Wall mount) :

206 3.2.1 Install order ECL2248-2723 in Wall

207 3.2.1.1 Bracket drawing and material preparation

208 The following figure shows the mounting bracket for mounting the ECL2248-2723 on the wall.

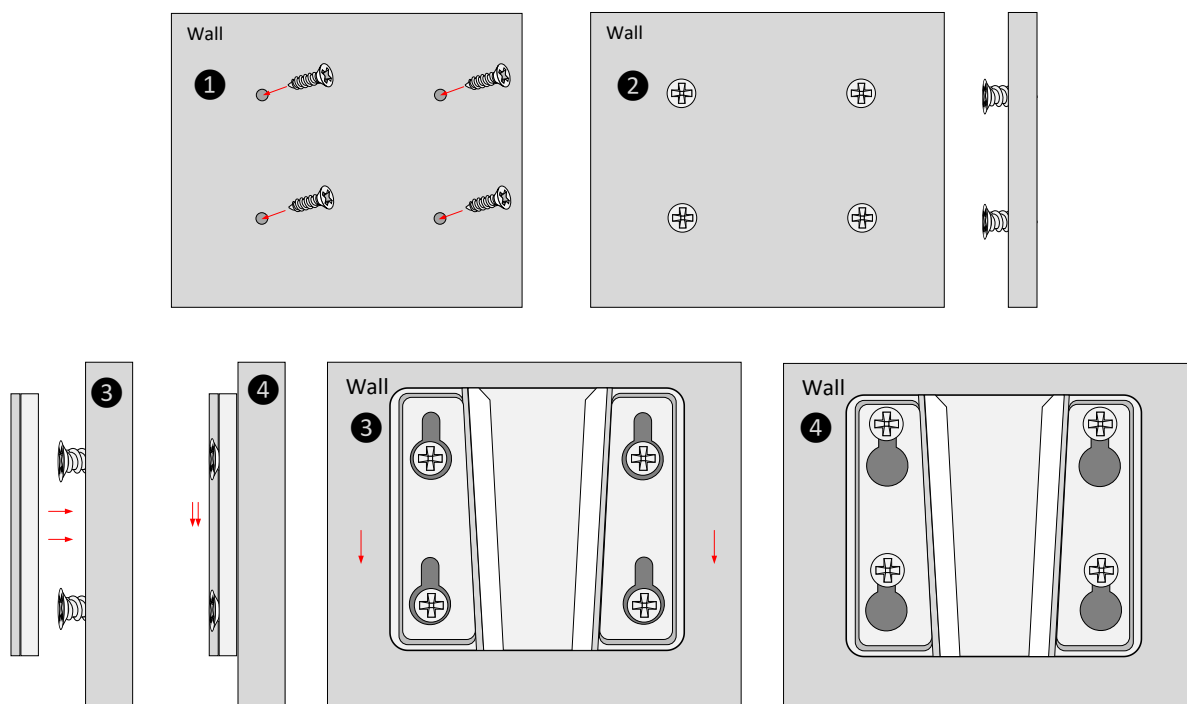


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210 **Figure 5. Bracket Mechanical drawings**

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212 3.2.1.2 Fix the Bracket to the ground



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Figure 6. Wall Side Bracket

3.2.1.3 Fix the Bracket to the ECL2248-2723

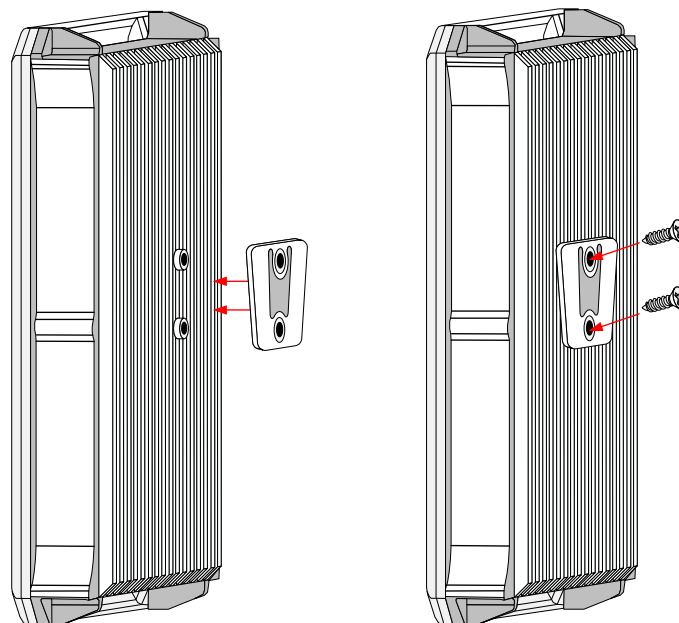


Figure 7. ECL2248-2723 Side Bracket

3.2.1.4 Assembling the ECL2248-2723

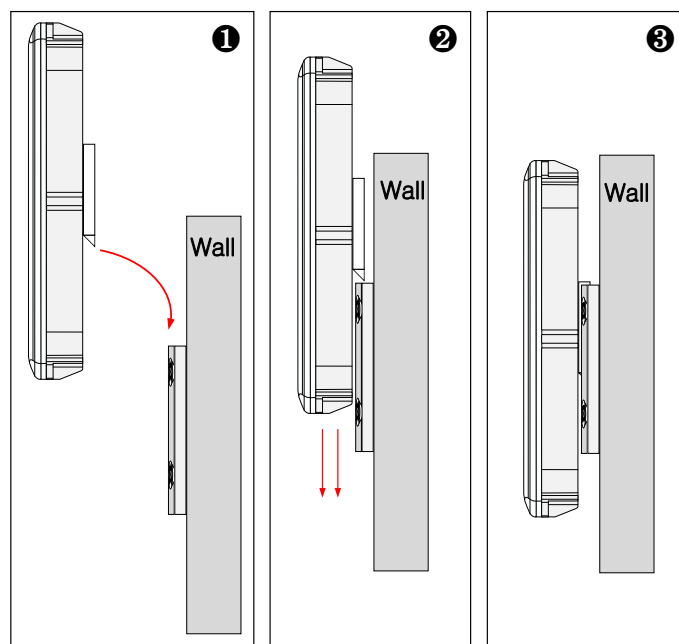


Figure 8. Assembly sequence

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