

# eRRU3253 Description

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1 Overview

The eRRU3253 is a remote radio unit. One or more eRRU3253 modules constitute the radio frequency (RF) part of a distributed E-UTRAN NodeB (eNodeB). The eRRU3253 can be mounted onto a pole, stand, or concrete wall. It also can be installed close to antennas to shorten the feeder length, reduce feeder loss, and improve system coverage. eRRU3253s modulate and demodulate baseband and RF signals, process data, amplify power, and detect standing waves. RRU is short for remote radio unit, and E-UTRAN is short for evolved universal terrestrial radio access network.

### 1.1 Exterior

Figure 1-1 shows the exterior of an eRRU3253.

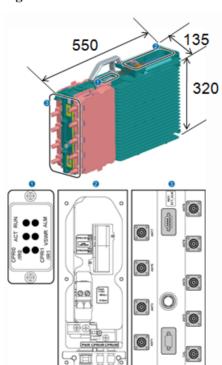


Figure 1-1 eRRU3253

eRRU3253 Description 1 Overview

## 1.2 Ports

Each RRU has a modular structure. Its external ports are located at the bottom of the module or in the cabling cavity. Table 1-1 describes the ports on the eRRU3253.

**Table 1-1** Ports on eRRU3253

Port	Connector	Quantity	Function
CPRT Port	DLC	2	Connect to eBBU
RF Port	Type N	8	Connect to antenna
Ground Port	OT	2	Ground protection
Calibration Port	Type N	1	Calibrate antenna
Power Supply Port	Easy power receptacle (press fit type)	1	Receive –48 V DC power
RET Port	DB9	1	Externally monitor port, get alarm and state info of external devices, Support management of external electrical equipment through RS485.

# **2** Technical Specifications

Table 2-1 eRRU3253(8T8R) device specifications

Item	Specification		
Frequency Band and Bandwidth	Frequency Band	Bandwidth	
	1.4 GHz:	10 MHz/20 MHz	
	1447 MHz to 1467 MHz		
Dimensions (H x W x D)	550 mm x 320 mm x 135 mm		
Weight	24 kg		
Input Power	-48 V DC, voltage range: -32 V DC to -60 V DC		
Maximum Output Power	8 x 8 W @ 2:2 (time slot ratio)		
	8 x 6 W @ 1:3		
Power consumption	Typical average power consumption: 250 W Typical max power consumption: 300 W		
Receiving sensitivity	-103dBm		
Temperature	-40°C to +45°C @ 2: 2+8 W/Path or 1: 3+6 W/Path		
	-40°C to +50°C @ 2: 2+6 W/Path or 1: 3+5 W/Path		
Relative Humidity	5% RH to 100% RH		
Atmospheric Pressure	70 kPa to 106 kPa		
Ingress Protection Rating	IP65		

# 3 Acronyms and Abbreviations

В

BBU baseband unit

C

CPRI common public radio interface

D

DC direct current

Ε

eNodeB E-UTRAN NodeB

E-UTRAN evolved universal terrestrial radio access network

R

RCU remote control unit

RET remote electrical tilt

RF radio frequency

RRU remote radio unit