

Fujitsu Dual-Band RU Operation Description

The Radio Unit (RU) is one of the components to configure the 5G RAN mobile communication system. The RU is controlled by the BBU and operating together with the BBU. Most of the operation and maintenance works are performed from the maintenance center through the BBU in the network.

During normal operation, the RU requires no intrusive maintenance work by maintenance personnel. The RU is designed to be replaced as a whole unit with a spare RU when it is identified as faulty.

The RU has the following features:

- Two mid-band frequencies - Bands n66 and n70
- Four antenna ports that are shared across the frequency bands
- One 10Gbps eCPRI optical port for communication to the BBU/Distributed Unit
- One Remote Electrical Tilt (RET) port
- One DC power port for connection to -48vDC power source

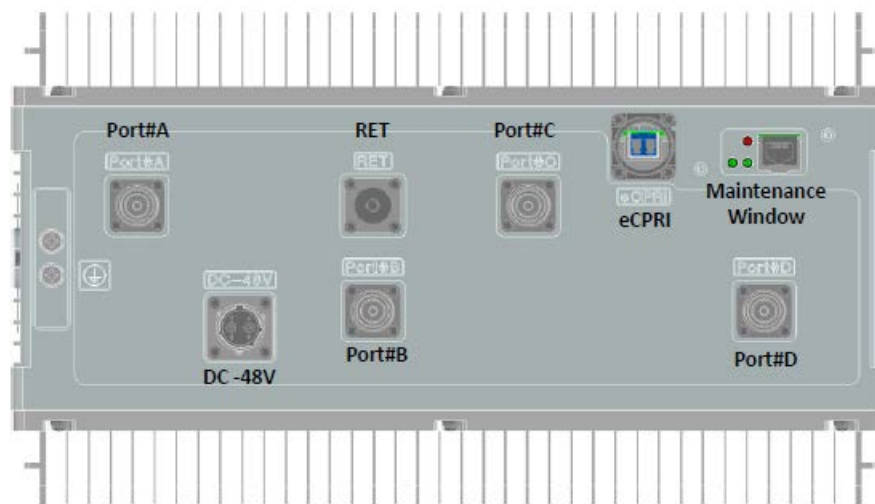


Figure 10
Bottom Layout Image

Item	Specification	
Frequency band	Band 70 UL: 1695...1710 MHz DL: 1995...2020 MHz (DL/UL Gap=285 MHz)	Band 66 UL: 1710...1780 MHz DL: 2110...2200 MHz (DL/UL Gap=330 MHz)
Antenna configuration	4T4R, 4 x 40 W	4T4R, 4 x 60 W
	Total power: 320 W Refer to Antenna Configuration .	
Carrier configuration	LTE: 5, 10, 15 ¹ , 20, 25 MHz BW	LTE: 5, 10, 15, 20 MHz BW
	Up to 2 carriers Refer to Carrier Configuration .	Up to 3 carriers Refer to Carrier Configuration .
Operating temperature	–40...+45 °C, with 1.0 m/s ambient wind speed (without sun shield or sun shade) ^{2, 3, 4}	
5G-NR	RU supports 5G-NR on two carriers on n70 and n66 bands. Single-carrier 5G-NR support is available on both n70 and n66 bands. RU supports a maximum of four carriers per port.	
Volume	< 30L (The volume calculation does not include connectors, protrusions, or manufacturing tolerances.)	
Dimension (W x H x D)	400 x 380 x 200 mm	
Weight	< 29.0 kg max (except the mounting brackets, other options)	
Power consumption	< 1300 W (under all operational condition, with AISG)	

1. 15 MHz is not currently supported