

Wavereach High Power Remote Radio Unit

RRUWR-B1-34T4R

Dual-Band | Band 1 & Band 3 4T4R | 320W Power Output

eCPRI/O-RAN Interface



Product Features

- **Operation Bandwidth:** 60MHz for Band 1 and 75MHz for Band 3
- **High RF Power:** 4T4R with 80W per port per band
- **Industry Standard Compliant:**
 - ✓ eCPRI: 10/25GE, 2 x SFP+/SPF28 ports
 - ✓ O-RAN split option 7.2x
- **Multi-Carriers Support**
- **Compact Design:** Lightweight, small form-factor and energy efficient
- **Rugged Enclosure:** IP67 for outdoor use
- **User-Friendly GUI:** Easy maintenance and configuration

Product Description

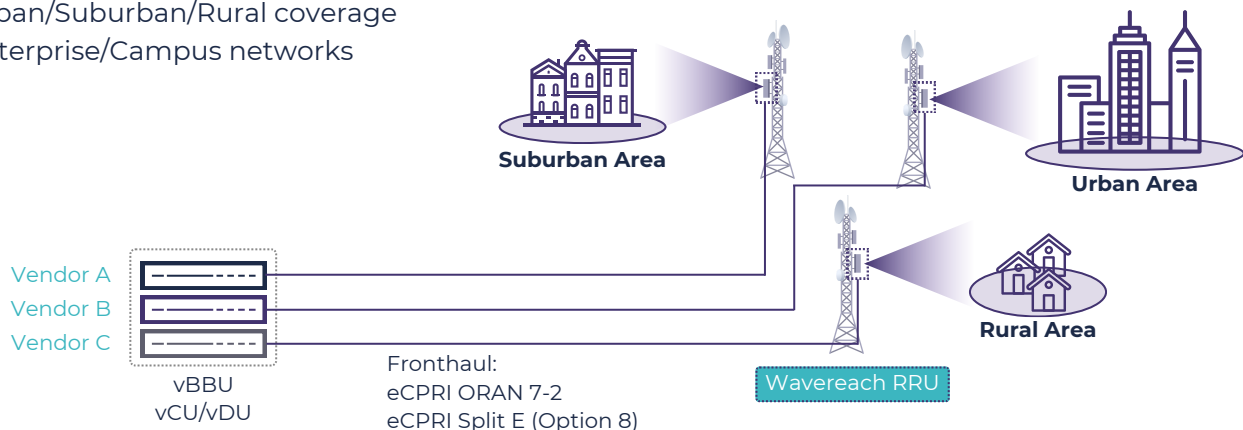
The **Band 1 & Band 3 4T4R High-Power RRUs** are key components of Wavereach’s advanced Open RAN radio portfolio, designed for flexible RAN deployment. Featuring efficient multi-carrier power amplifiers, a compact and lightweight design, and software-defined radio technology, these RRUs deliver high performance across diverse environments.

Equipped with Multi-TRX technology, they support 4T4R and 2T2R configurations for both greenfield deployments and capacity expansions in indoor and outdoor applications. Wavereach’s RRU series is compatible with multiple Radio Access Technologies (Multi-RAT), including LTE, GSM, WCDMA, NR, NB-IoT, and LTE-M, ensuring strong performance under various conditions.

This solution enables mobile service providers to adopt Open RAN with a minimized total cost of ownership, faster deployment, simplified upgrades, and consistent service quality.

Application Scenarios

- Mobile broadband for Data/Voice services
- Urban/Suburban/Rural coverage
- Enterprise/Campus networks



Technical Specification

Radio Specification			
Technology	LTE/UMTS*/GSM*/NR*		
TRx Configuration	4T4R		
Operation Bandwidth	Band 1: 60MHz; Band 3: 75MHz		
Instantaneous Bandwidth	Band 1: 60MHz; Band 3: 75MHz		
Occupied Bandwidth	Band 1: 40MHz; Band 3: 40MHz		
Capacity (per antenna port)	Band 1	UMTS	1 carrier
		LTE	Up to 2 carriers (5/10/15/20 MHz)
		UMTS+LTE	1 carrier(UMTS) + 1 carrier (LTE)
	Band 3	UMTS	1 carrier
		LTE	Up to 2 carriers (5/10/15/20 MHz)
		GSM+UMTS**	2 carriers (GSM) + 1 carrier (UMTS)
GSM+LTE**		2 carriers (GSM) + 1 carrier (LTE)	
UMTS+LTE	1 carrier (UMTS) + 1 carrier (LTE)		
Operating Frequency	Band 1: UL: 1920MHz - 1980MHz, DL: 2110MHz - 2170MHz Band 3: UL: 1710MHz - 1785MHz, DL: 1805MHz - 1880MHz		
Interface to BBU	eCPRI (10/25GE): O-RAN split option 7.2x support		
Output Power per Tx	80W (Band 1: 40W + Band 3: 40W)		
ACLR	Compliant with 3GPP TS 36.104		
Transmitter Spurious Emissions	Compliant with 3GPP TS 36.104		
EVM	Compliant with 3GPP TS 36.104		
Noise Figure	Typical: 3.0dB		
Blocking Features	Compliant with 3GPP TS 36.104		
Receiver Spurious Emissions	Compliant with 3GPP TS 36.104		
Interface	ANT1-4	4 x 4.3-10 Female	
	OPT1-2	2 x SFP+/SFP28	
	Power	DC -48V	
	RET	DIN 8 Female (AISG 2.0) via extension cable	
	MON	DIN 6 Male via extension cable	
	Debug	Mini-USB (Ethernet over Mini-USB via LMT cable)	
	GPS	Optional, N-Type Female, GPS Bands customized	
LED Indicator	PWR	Power Running Status	
	RUN/ALM	System Running Status	
	ACT	PA Running Status	
	VSWR	Channel Running Status	
	OPI	Optical Module Running Status	
	OP2	Optical Module Running Status	

Electrical and Mechanical Specification	
Volume	27L (480mm x 375mm x 150mm)
Power Supply	DC -57.6 ~ -40V
Power Consumption	Max: 980W***
Weight	25kg
Humidity	5% ~ 100%
Operating Temperature	-40°C ~+55°C
IP Rating	IP 67
Mounting Options	Pole (45mm to 120mm) / Wall / Side by side RU mounting rail ****

Note: * Support via software upgrade.

** Support LTE+GSM, UMTS+GSM, not support GSM only.

*** The max power consumption of an RRU is measured at 25°C ambient temperature. The actual power consumption may have a 10% deviation from the value.

**** Mounting kit needs to be ordered separately.