

Wavereach High Power Remote Radio Unit

RRUWR-B28A4T4R

Tri-Band | Band 28A+B20+B8 2T4R | 280W Power Output

eCPRI/O-RAN Interface



Product Features

- **Operation Bandwidth:** MAX 35MHz
- **High RF Power:** 2T4R with 60W per port per band
- **Industry Standard Compliant:**
 - ✓ eCPRI: 10/25GE, 2 x SFP+/SFP28 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

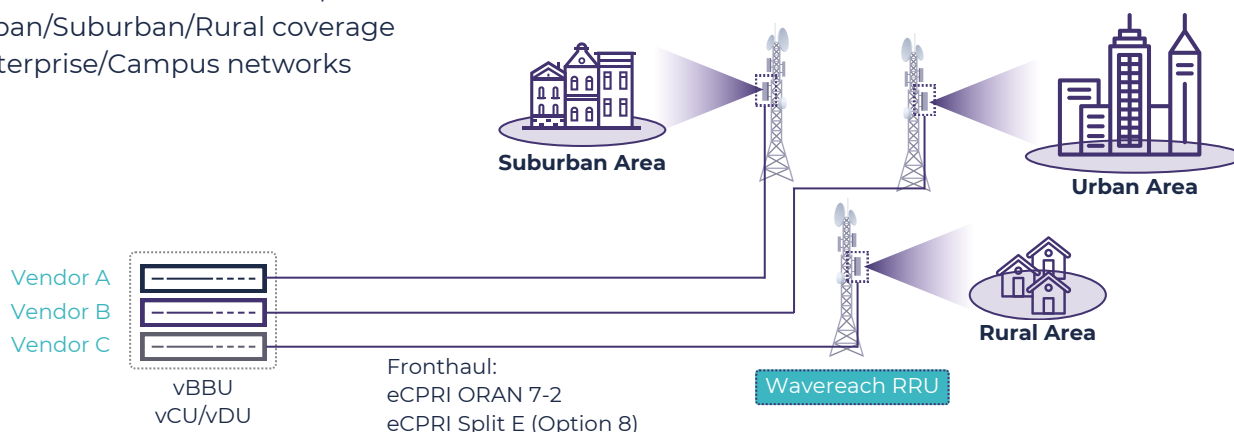
The **Band 28A+B20+B8 2T4R High-Power RRU** is a key component of Wavereach’s latest Open RAN portfolio, designed for flexible RAN deployment. Featuring efficient multi-carrier power amplifiers, a compact and lightweight design, and software-defined radio technology, this RRU delivers high performance across diverse environments.

Equipped with Multi-TRX technology, it supports capacity upgrades with MIMO configurations for both 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	2T4R		
Operation Bandwidth	B28A: 30MHz; B20: 30MHz; B8: 35MHz		
Instantaneous Bandwidth	B28A: 30MHz; B20: 30MHz; B8: 35MHz		
Occupied Bandwidth	B28A: 30MHz; B20: 30MHz; B8: 35MHz		
Capacity (per antenna port)	Band 28A	LTE	Up to 2 carriers (5/10/15/20 MHz)
		NR	1 carrier
	Band 20	LTE	Up to 2 carriers (5/10/15/20 MHz)
		NR	1 carrier
	Band 8	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	B28A UL: 703MHz - 733MHz / DL: 758MHz - 788MHz B20 UL: 832MHz - 862MHz / DL: 791MHz - 821MHz B8 UL: 880MHz - 915MHz / DL: 925MHz - 960MHz		
Interface to BBU	eCPRI (10/25GE): O-RAN split option 7.2x support eCPRI split E (Option 8) support		
Output Power per Tx	B8: 2x60W and B28A: 2x40W and B20: 2x40W		
ACLR	Compliant with 3GPP TS 37.104		
Transmitter Spurious Emissions	Compliant with 3GPP TS 37.104		
EVM	Compliant with 3GPP TS 37.104		
Noise Figure	Typical: 3.2dB		
Blocking Features	Compliant with 3GPP TS 37.104		
Receiver Spurious Emissions	Compliant with 3GPP TS 37.104		
Interface	ANTI-4	4 x 4.3-10 Female	
	OPTI-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	
	OP1	Optical Module Running Status	
	OP2	Optical Module Running Status	

Electrical and Mechanical Specification

Volume	30.9L (480mm x 375mm x 172mm)
Power Supply	DC -57.6 ~ -40V
Power Consumption	Max: 960W***
Weight	28.5kg
Humidity	5% ~ 100%
Operating Temperature	-40°C ~ +55°C
IP Rating	IP 67
Mounting Options	Pole (45mm to 75mm) / Wall **** mounting kit included in the RRU package

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.

**** Support 75mm-120mm pole mounting by optional mounting kit.