

Radio Capabilities

Description

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1 Radio Capabilities

This section gives an overview of the radio configuration capabilities for GSM, WCDMA, LTE FDD, LTE TDD, LTE LAA (License Assisted Access), CDMA, NR, and MI (Massive IoT), both in single standard and in multistandard mixed mode.

The choice of radios determines the radio frequencies of a configuration. Refer to Radio Description, Radio Unit Description, Remote Radio Unit Description, Antenna Integrated Radio Unit Description, Indoor Radio Unit Description, Radio Dot Description, and Technical Product Description, RRU for RRU 22 (an RBS 3000 legacy product, see RBS 3000 CPI) when selecting radios that correspond to required frequencies.

Radio Support for RBS 6000 list the radio support for the RBS 6000 series.

[Supported Radio Frequencies](#) on page 2 lists the supported radio frequencies.

The tables also list the maximum output power for each radio, Instantaneous Bandwidth (IBW), operational bandwidth and Virtual IBW (see [Virtual IBW](#) on page 35 for more information).

[Non-Frequency Specific Radio Data](#) on page 32 lists the non-frequency specific data including number of antenna branches and data port line rates.

Radios supporting single mode GSM are also supported for GSM + GSM with Dual DUG Sharing.

Massive IoT support multiple technologies. For more information, see [Radio Configurations for Massive IoT](#).

ESS is a software feature. For more information, see [Radio Configurations for ESS](#).

Note: [Supported Radio Frequencies](#) on page 2 lists the regulatory approved configurations. The stated standards and mixed moded configurations on a specific frequency band may not be generally available on all markets or supported in all software releases. Contact the local Ericsson representative for details.

Note: IBW for RUS 01 and RRUS 01 is dependent on GSM modulation technique. [IBW for RUS 01 and RRUS 01 Depending on GSM Modulation Technique](#) on page 32 lists the IBW according to the modulation technique.

Output power above a certain level, WCDMA cell carriers, and GSM cell carriers require Hardware Activation Codes (HWACs). Information about HWACs can be found in the following documents:

GSM: User Description, RAN handling of software licenses and hardware activation codes and MCPA Guideline in the GSM RAN CPI library.



WCDMA: Licenses and Hardware Activation Codes in the WCDMA RAN CPI library.

LTE or NR: Manage Licenses and Hardware Activation Codes in the LTE RAN CPI library or NR RAN CPI library. Information on HWACs for carrier bandwidths can also be found in this document.

Hardware-related capabilities: Hardware-Related Capabilities in the LTE RAN CPI library or NR RAN CPI library.

Note: IRU 2242 can be installed in RBS 6202, RBS 6601, or Remote IRU Enclosure and connected to DUs or Baseband units in all RBS 6000 RBSs.

1.1 Supported Radio Frequencies

[page 2](#) shows the latest released product data, for more detailed information see Supported Radio Capabilities. [Mixed Mode Radio Configuration Rules](#) on page 26 describes the general rules for mixed mode configurations.

Table 1 Supported Radio Frequencies

Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
Band 0	RRUS 01	G, W, L, MI ⁽⁸⁾	CM, IB, GB, SA	60	20 ⁽⁹⁾	20
	RRUS 02	G, W, L, MI ⁽⁸⁾	CM, IB, GB, SA	100	25	25 ⁽¹⁰⁾
	RUG	G	-	70	-	-
	RUS 01	G, W, L, MI ⁽⁸⁾	CM, IB, GB, SA	60	20 ⁽⁹⁾	20
	RUS 02	G, W, L, MI ⁽⁸⁾	CM, IB, GB, SA	100	25	25 ⁽¹⁰⁾
Band 0A ⁽¹¹⁾	Radio 2219	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×60	25 ⁽¹²⁾	25
	Radio 4480 44B0A 44B28 C	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×60 ⁽¹⁴⁾⁽¹⁵⁾	25 ⁽¹⁶⁾	25
	Radio 4499 44B0A 44B28 C	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×60 ⁽¹⁴⁾⁽¹⁷⁾	25 ⁽¹⁶⁾	25
	RRUS 02 ⁽¹⁸⁾	G, W, L, MI ⁽⁸⁾	CM, IB	100	25	25 ⁽¹⁰⁾
Band 0B	Radio 2219	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	25 ⁽¹²⁾	25
Band 1	AIR 21 B1A B3P	W, L, MI	CM, IB, GB	2×30	2×20 ⁽¹⁹⁾	2×20
	AIR 21 B1A B12P B8P	W, L, MI	CM, IB, GB	2×30	2×20 ⁽¹⁹⁾	2×20



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	AIR 2488 B1A B3P B7P	W, L, MI, NR, ESS	CM, IB, GB, SA	2×60	60	60
	AIR 2488 B1A B7P	W, L, MI, NR, ESS	CM, IB, GB, SA	2×60	60	60
	AIR 2488 B3A B1A B7P	W, L, MI, NR, ESS	CM, IB, GB, SA	2×60	60	60
	AIR 4455 B1 B3	W, L, MI, NR, ESS	CM, IB, GB, SA	4×30 ⁽²⁰⁾	60	60
	Dot 2272 B1B3 + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	40	40
	Dot 2282 B1B3 + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	40	40
	mRRUS 12	W, L, MI	CM	2×5	25	20
	Radio 0208	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	60	60 ⁽²²⁾
	Radio 2203	W, L, MI	CM	2×5	45 ⁽²³⁾	45
	Radio 2212	W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	60	60
	Radio 2217	W, L, MI, NR, ESS	CM, IB, GB	2×40	45 ⁽²⁴⁾ ⁽²⁵⁾	45
	Radio 2219	W, L, MI, NR, ESS	CM, IB, GB	2×60	60	60
	Radio 2242 B1 B3	W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	60	60
	Radio 2260 22B1 22B3 C	W, L, MI, NR ⁽²⁶⁾	CM, IB, GB, SA ⁽²⁷⁾	2×80 ⁽²⁸⁾	60 ⁽²⁹⁾	60
	Radio 2279 22B1 22B3 C	W, L, MI, NR ⁽²⁶⁾	CM, IB, GB, SA ⁽²⁷⁾	2×80 ⁽²⁸⁾	60 ⁽²⁹⁾	60
	Radio 4415	W, L, MI, NR, ESS	CM, IB, GB, SA	4×40	60	60
	Radio 4428	W, L, MI, NR, ESS	CM, IB, GB, SA	4×40	60 ⁽³⁰⁾	60
	Radio 4442 B1 B3	W, L, MI, NR, ESS	CM	4×20 ⁽³¹⁾	60	60
	Radio 4443 B1 B3	W, L, MI, NR, ESS	CM, IB, GB, SA	4×60	60 ⁽³²⁾	60
	Radio 4480 44B1 44B3 C	W, L, MI, NR, ESS	CM, IB, GB, SA	4×60 ⁽¹⁵⁾ ⁽³³⁾	60 ⁽³⁴⁾	60
	Radio 4480 44B1 44B7 C	W, L, MI, NR	CM, IB, GB, SA	4×60 ⁽³⁵⁾ ⁽⁴²⁾	60	60
	Radio 4499 44B1 44B3 C	W, L, MI, NR	CM, IB, GB, SA	4×60 ⁽³³⁾ ⁽³⁶⁾	60 ⁽³⁴⁾	60
	Radio 4499 44B1 44B7 C	W, L, MI, NR, ESS	CM, IB, GB, SA	4×60 ⁽³⁷⁾	60 ⁽³⁴⁾	60
	RBS 6501 radio part	W, L ⁽⁸⁾	-	2×5	25	20
	RD 2242 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RD 2243 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RD 4442 B1 B3 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RD 4442 B1 B7 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RD 4453 B1 B3 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RRU 22 ⁽³⁹⁾	W	-	40	10	10
	RRUS 01	W, L, MI	CM, IB, GB	80	20 ⁽⁹⁾	20
	RRUS 11	W, L, MI	CM, IB, GB	2×40	20	20
	RRUS 12	W, L, MI	CM, IB, GB	2×60	40	20
	RRUS 13	W, L, MI	CM, IB, GB	2×60	45	40
	RRUS A2	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
	RRUS A3	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	40
	RRUW 01	W	-	60	20	20
	RRUW 03	W	-	20	20	20
	RUS 01	W, L, MI	CM, IB, GB	80	20 ⁽⁹⁾	20
	RUS 02	W, L, MI	CM, IB, GB	100	40	20
	RUW 01	W	-	60	20	20
	Vault Radio System 2268	W, L, MI	CM	2×5	45 ⁽²³⁾	45
Band 1A	RRU 22F3 ⁽⁴⁰⁾	L, MI	CM	2×6	20	20
Band 1B	Radio 2242 B1B B3A	W, L, MI	CM, IB	2×80 ⁽⁴¹⁾	55	55
	Radio 4429	W, L, MI, NR	CM, IB, GB, SA	4×60 ⁽⁴²⁾	55	55
Band 2	AIR 1641 B2/25A B66A	L, MI	CM, IB, GB	160 ⁽⁴³⁾	60	60
	AIR 21 B2A B4P	G, W, L, MI	CM, IB	2×30	2×20 ⁽¹⁹⁾⁽⁴⁴⁾	2×20
	AIR 21 B2A B12P B8P	G, W, L, MI	CM, IB, GB, SA	2×30	2×20 ⁽¹⁹⁾⁽⁴⁴⁾	2×20
	AIR 32 B2A B66AA ⁽⁴⁵⁾	G ⁽¹³⁾ , W, L, MI, NR	CM, IB, GB, SA	4×30	40	40 ⁽⁴⁶⁾
	AIR 32 B2A B66AP	G ⁽¹³⁾ , W, L, MI, NR	CM	4×30	40	40 ⁽⁴⁶⁾
	AIR 32 B2A B7P LBP	G ⁽¹³⁾ , W, L, MI	CM	4×30	40	40 ⁽⁴⁶⁾
	AIR 3246 B2 B25	L, MI	CM	160	60	60
	AIR 4455 B2/B25 B66A	G, W, L, MI	CM, IB, GB, SA	4×30 ⁽²⁰⁾	60	60
	mRRUS 12	W, L, MI	CM	2×5	25	20
	Radio 0208	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	60	60 ⁽²²⁾
	Radio 2203 B2 B25	W, L, MI, NR, ESS	CM, IB, GB	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	Radio 2212 B2 B25	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	60 ⁽⁴⁸⁾ ⁽⁴⁹⁾	60
	Radio 2217	W, L, MI, NR, ESS	CM, IB, GB, SA	2×40	40 ⁽²⁴⁾	40
	Radio 2219	G ⁽¹³⁾ , W, L, MI	CM, IB	2×80	40 ⁽⁵⁰⁾ ⁽⁵¹⁾	40
	Radio 4402 B2/B25	W, L, MI, NR, ESS	CM, IB, GB, SA	2×5	60 ⁽⁵²⁾	60
	Radio 4415 B2 B25	G, W, L, MI, NR, ESS	CM, IB, GB, SA	4×40	60 ⁽⁵³⁾ ⁽⁵⁴⁾	60
	Radio 4455 B2/B25 B66A	W, L, MI, NR, ESS	CM, IB, GB, SA	3×40 ⁽⁵⁵⁾	60 ⁽³⁴⁾	60
	Radio 4499 44B2/B25 44B66A	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×60 ⁽⁸²⁾ ⁽⁵⁶⁾	60 ⁽⁸⁰⁾	60
	Radio 8843 B2 B66A	L, MI, NR, ESS	CM, IB, GB	4×40 2×60 ⁽⁵⁷⁾	60	60
	RBS 6501 radio part	W, L ⁽⁸⁾	-	2×5	25	20
	RD 2242 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RRU 22 ⁽³⁹⁾	W	-	20/40	10	10
	RRUS 01	G, W, L, MI	CM, IB, GB, SA	80 ⁽⁵⁸⁾	20 ⁽⁹⁾ ⁽⁵⁹⁾	20
	RRUS 11	W, L, MI	CM, IB, GB, SA	2×40	20	20
	RRUS 12	G, W, L, MI	CM, IB, GB, SA	2×60	40	25 ⁽¹⁰⁾
	RRUS 32	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×40	40	40 ⁽⁴⁶⁾
	RRUS A2	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
	RRUW 02	W	-	60	20	20
	RUG	G	-	63	-	-
	RUS 01	G, C, W, L, MI	CM, IB, GB, SA	80 ⁽⁵⁸⁾	20 ⁽⁹⁾ ⁽⁵⁹⁾	20
	RUS 02	G, W, L, MI	CM, IB, GB, SA	80	40	25 ⁽¹⁰⁾
	Vault Radio System 2268 B2 B25	W, L, MI, NR, ESS	CM, IB, GB	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾
Band 3	AIR 21 B3A B1P	G, W, L, MI ⁽⁸⁾ ⁽⁶⁰⁾	CM, IB, GB, SA	2×30	2×20 ⁽¹⁹⁾ ⁽⁴⁴⁾	2×20
	AIR 21 B3A B12P B8P	G, W, L, MI ⁽⁸⁾ ⁽⁶⁰⁾	CM, IB, GB, SA	2×30	2×20 ⁽¹⁹⁾ ⁽⁴⁴⁾	2×20
	AIR 2488 B3A B1A B7P	G, L, MI, NR, ESS ⁽⁶¹⁾	CM, IB, GB, SA	2×60	70 ⁽⁶²⁾	70
	AIR 2488 B3A B1P B7P	G, L, MI, NR ⁽⁶¹⁾ ⁽⁶³⁾ , ESS	CM, IB, GB, SA	2×60	70 ⁽⁶²⁾	70
	AIR 2488 B3A B7P	G, L, MI, NR ⁽⁶¹⁾ , ESS	CM, IB, GB, SA	2×60	70 ⁽⁶²⁾	70



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	AIR 32 B3A B7P LBP	G ⁽¹³⁾ , L, MI	CM, IB, GB, SA	4×30	40	40 ⁽⁴⁶⁾
	AIR 32 B7A B3A LBP ⁽⁴⁵⁾	G ⁽¹³⁾ , L, MI	CM, IB, GB, SA	4×30	40	40 ⁽⁴⁶⁾
	AIR 3246	L, MI	CM, IB, GB	160	45	45
	AIR 4455 B1 B3	G, L, MI, NR, ESS	CM, IB, GB, SA	4×30 ⁽²⁰⁾	75 ⁽⁶⁴⁾	75
	Dot 2272 B1B3 + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	40	40
	Dot 2282 B1B3 + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	40	40
	mRRUS 12	W, L, MI	CM	2×5	25	20
	Radio 0208	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	75	75 ⁽²²⁾
	Radio 2203	L, MI	CM	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾
	Radio 2212	G, L, MI, NR, ESS	CM, IB, GB, SA	2×80	75 ⁽⁶⁵⁾⁽⁶⁶⁾	75
	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	45 ⁽²⁴⁾	45 ⁽⁶⁷⁾
	Radio 2219	G, L, MI, NR, ESS	CM, IB, GB, SA	2×80	55 ⁽⁶⁸⁾⁽⁶⁹⁾	55
	Radio 2242 B1 B3	G ⁽¹³⁾ , L, MI, NR, ESS	CM, IB, GB, SA	2×80	75 ⁽⁷⁰⁾	75
	Radio 2260 22B1 22B3 C	G ⁽¹³⁾ , L, MI, NR ⁽⁷¹⁾	CM, IB, GB, SA ⁽²⁷⁾	2×80 ⁽⁷²⁾	75 ⁽²⁹⁾⁽⁷³⁾	75
	Radio 2279 22B1 22B3 C	G ⁽¹³⁾ , L, MI, NR ⁽⁷¹⁾	CM, IB, GB, SA ⁽²⁷⁾	2×80 ⁽⁷²⁾	75 ⁽²⁹⁾⁽⁷³⁾	75
	Radio 4407	L, MI	CM, IB	4×20	65	60
	Radio 4415	G, L, MI, NR, ESS	CM, IB, GB, SA	4×40	75 ⁽⁷⁴⁾⁽⁷⁵⁾ (76)	75
	Radio 4417	G, L, MI	GB, SA	4×60	75	75
	Radio 4428	G, L, MI, NR, ESS	CM, IB, GB, SA	4×40	75	75 ⁽⁹⁴⁾
	Radio 4429	G, L, MI, NR, ESS	CM, IB, GB, SA	4×60	75 ⁽⁷⁷⁾	75
	Radio 4442 B1 B3	L, MI, NR, ESS	CM, IB	4×20 ⁽³¹⁾	75 ⁽⁷⁸⁾	75
	Radio 4443 B1 B3	G ⁽¹³⁾ , L, MI, NR, ESS	CM, IB, GB, SA	4×60	75 ⁽⁷⁹⁾	75
	Radio 4480 44B1 44B3 C	G ⁽¹³⁾ , L, MI, NR, ESS	CM, IB, GB, SA	4×60 ⁽⁸¹⁾⁽⁸²⁾⁽¹⁵⁾	75 ⁽⁸⁰⁾	75
	Radio 4499 44B1 44B3 C	G ⁽¹³⁾ , L, MI, NR, ESS	CM, IB, GB, SA	4×60 ⁽⁸¹⁾⁽⁸²⁾⁽³⁶⁾	75 ⁽⁸⁰⁾	75
	RBS 6501 radio part	W, L ⁽⁸⁾	-	2×5	25	20
	RD 2242 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ^{(5) (6)} (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RD 2243 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 4442 B1 B3 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 4442 B3 B7 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 4442 B40A B3 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 4453 B1 B3 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RRUS 01	G, W, L, MI (8)(60)	CM, IB, GB, SA	80	20 ⁽⁹⁾ (83)	20
	RRUS 12	G, W, L, MI (84)(85)	CM, IB, GB, SA	2×60	40	25 ⁽¹⁰⁾
	RRUS 13	G, W, L, MI (8)(86)	CM, IB, GB, SA	2×60	45 ⁽⁸⁷⁾	40
	RRUS 14	G, L, MI	CM, IB, GB, SA	2×80	75 ⁽⁸⁸⁾	60.4 ⁽⁸⁹⁾
	RRUS 14s	G, L, MI	CM, IB, GB, SA	2×80	75 ⁽⁸⁸⁾	60.4 ⁽⁸⁹⁾
	RRUS 32	G ⁽¹³⁾ , L, MI	CM, IB, GB, SA	4×40	40	40 ⁽⁴⁶⁾
	RRUS A2	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
	RRUS A3	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	40
	RUG	G	-	63	-	-
	RUS 01	G, W, L, MI (8)(60)	CM, IB, GB, SA	80	20 ⁽⁹⁾ (83)	20
	RUS 02	G, W, L, MI (8)	CM, IB, GB, SA	80	40	25 ⁽¹⁰⁾
	RUS 03	G, W, L, MI (8)	CM, IB, GB, SA	80	40	40
	Vault Radio System 2268	L, MI	CM	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾
	Band 3A	Radio 2217	W, L, MI, NR, ESS	CM, IB	2×40	45 ⁽²⁴⁾
Radio 2219		G, L, MI, NR, ESS	CM, IB, GB, SA	2×80	45 ⁽⁹⁰⁾	45
Radio 2242 B1B B3A		G ⁽¹³⁾ , W, L, MI	CM, IB, SA	2×80 ⁽⁴¹⁾	50 ⁽⁹¹⁾	50
RRUS 12		G, W, L, MI	CM, IB, GB, SA	2×60	40	25 ⁽¹⁰⁾
RRUS 13		G, W, L, MI	CM, IB, GB, SA	2×60	40	40
Band 3B	Radio 2219	G, L, MI, NR, ESS	CM, IB, GB, SA	2×80	40 ⁽⁹²⁾	40
	Radio 4415	G, L, MI, NR, ESS	CM, IB, GB, SA	4×80	55 ⁽⁹³⁾	55
	Radio 4428	G, L, MI, NR, ESS	CM, IB, GB, SA	4×40	55	55 ⁽⁹⁴⁾



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	Radio 4429	G, L, MI, NR, ESS	CM, IB, GB, SA	4×60	47.5 ⁽⁷⁷⁾	55
	RRUS 13	G, L, MI	CM, IB, GB, SA	2×60	40	40
	RUS 03	G, L, MI	CM, IB, GB, SA	80	40	40
Band 3C	Radio 2203	W, L, MI	CM	2×5	40	40
	Vault Radio System 2268	W, L, MI	CM	2×5	40	40 ⁽⁴⁷⁾
Band 3D	RRU 22F1	L, MI	CM	2×10	60	20
Band 3E	Dot 2272 B3E B40A + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	25	25
	Dot 2282 B3E B40A + IRU 8844 or IRU 8884	L, MI	CM	2×125 mW	25	25
Band 4	AIR 21 B4A B2P	W, L, MI	CM, IB, GB, SA	2×30	2×20 ⁽¹⁹⁾	2×20
	AIR 21 B4A B12P B5P	W, L, MI	CM, IB	2×30	2×20 ⁽¹⁹⁾	2×20
	AIR 21 B4A B12P B8P	W, L, MI	CM, IB	2×30	2×20 ⁽¹⁹⁾	2×20
	AIR 32 B4A B2P	W, L, MI	CM, IB, GB, SA	4×30	45	40 ⁽⁹⁵⁾
	mRRUS 12	W, L, MI	CM, IB, GB	2×5	25	20
	RBS 6501 radio part	W, L ⁽⁸⁾	-	2×5	25	20
	RD 2242 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RRU 22 ⁽³⁹⁾	W	-	20/40	10	10
	RRUL 11	L, MI	CM	2×30	10	10
	RRUS 11	C, W, L, MI	CM, IB, GB, SA	2×40	20	20
	RRUS 12	W, L, MI	CM, IB, GB, SA	2×60	40	20
	RRUS 32	W, L, MI	CM, IB, GB, SA	4×40	45 ⁽⁹⁶⁾	40
	RRUS A2	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
	RUS 01	C, W, L, MI	CM, IB, GB, SA	80	20	20
Band 5	Radio 0208	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	25	25
	Radio 2203	W, L, MI, NR, ESS	CM	2×5	25	25
	Radio 2212	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	25	25
	Radio 2217	W, L, MI, NR, ESS	CM, IB, GB, SA	2×40	25	25 ⁽⁹⁵⁾
	Radio 2219	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	25 ⁽⁹⁷⁾	25
	Radio 4449 B5 B12A	L, MI, NR, ESS	CM	4×40 ⁽⁹⁸⁾ 2×60 ⁽⁹⁹⁾	25	25
	Radio 4449 B5 B13 ⁽¹²³⁾	L, MI, NR	CM	4×40 2×60 ⁽¹⁰⁰⁾	25	25



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	Radio 4478	W, L, MI, NR, ESS	CM, IB, SA	4×40	25 ⁽¹⁰¹⁾	25
	RD 2242 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	25	25
	RRU 22 ⁽³⁹⁾	W	-	40	10	10
	RRUS 01	G, W, L, MI	CM, IB, GB, SA	80	20 ⁽⁹⁾	20
	RRUS 11	C, W, L, MI	CM, IB, GB	2×40	20	20
	RRUS 12	G, W, L, MI	CM, IB	2×60	25	25
	RRUW 02	W	-	60	20	20
	RUG	G	-	70	-	-
	RUS 01	G, W, L, MI	CM, IB, GB, SA	80 ⁽¹⁰²⁾	20 ⁽⁹⁾	20
	RUS 02	G, C, W, L, MI	CM, IB, GB, SA	100	25	25 ⁽¹⁰³⁾
	Vault Radio System 2268	W, L, MI, NR, ESS	CM	2×5	25	25
Band 5A	Radio 2237	L, MI	CM, IB, GB	2×40	19.4	19.4
Band 5B	Radio 2219	L, MI	CM, IB, GB, SA	2×60 ⁽¹⁰¹⁾	11	11
	Radio 2468	L, MI	CM	2×80	11	11
Band 7	AIR 21 B7A B2P	L, MI	CM, IB, GB	2×30	2×20 ⁽¹⁹⁾	2×20
	AIR 32 B7A B3A LBP ⁽⁴⁵⁾	L, MI	CM, IB, GB	4×30	40	40
	AIR 32 B7A B66AA LBP ⁽⁴⁵⁾	L, MI	CM, IB, GB	4×30	40	40
	AIR 32 B7A HBP LBP	L, MI	CM, IB, GB	4×30	40	40
	mRRUS 12	L, MI	CM	2×5	25	20
	Radio 0208	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	50	50 ⁽²²⁾
	Radio 2203	L, MI	CM	2×5	40	40
	Radio 2212	L, MI, NR, ESS	CM, IB	2×80	50	40 ⁽¹⁰⁴⁾
	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	50 ⁽¹⁰⁵⁾	50 ⁽¹⁰⁵⁾
	Radio 4415	L, MI, NR, ESS	CM, IB, GB, SA	4×40	70	70
	Radio 4480 44B1 44B7 C	L, MI, NR	CM, IB, GB, SA	4×40 ⁽⁴²⁾ ⁽¹⁰⁶⁾	70	70
	Radio 4499 44B1 44B7 C	L, MI, NR	CM, IB, GB, SA	4×40 ⁽³⁷⁾	70 ⁽³⁴⁾	60
	RBS 6501 Radio part	L	-	2×5	25	20
	RD 2242 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 2243 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RD 4442 B1 B7 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
RD 4442 B3 B7 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40	



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RRUS 11	L, MI	CM, IB, GB	2×30	20	20
	RRUS 12	L, MI	CM, IB, GB	2×40	40	20
	RRUS 13	L, MI	CM, IB, GB	2×40	40	40
	RRUS 32	L, MI	CM, IB, GB	4×40	40	40
	RRUS A2	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
	RRUS A3	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	40
	RUS 01	L, MI	CM, IB, GB	40	20	20
	Vault Radio System 2268	L, MI	CM	2×5	40	40
Band 7A	AIR 32 B7AA HBP LBP	L, MI	CM, IB, GB	4×30	40	40
	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	50	50
	Radio 4415	L, MI, NR, ESS	CM, IB	4×40	60	60
	RRUS 13	L, MI	CM, IB, GB	2×40	40	40
	RRUS 32	L, MI	CM, IB, GB	4×40	40	40
Band 8	AIR 11 B8A B20P	G, W	EC	2×30	2×20 ⁽⁴⁴⁾	2×20
	Radio 2203	W, L, MI	CM	2×5	35	35 ⁽⁴⁷⁾
	Radio 2212 ⁽¹⁰⁷⁾	G ⁽¹³⁾ , W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	35 ⁽¹⁰⁸⁾	35
	Radio 2217	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×40 ⁽¹⁰⁹⁾	35	35 ⁽¹¹⁰⁾
	Radio 2219	G, W, L, MI, NR, ESS	CM, IB, GB, SA	2×60	35 ⁽¹¹¹⁾	35
	Radio 2238 B8 B20 B28B	G ⁽¹³⁾ , W, L, MI, NR, ESS	CM, IB, GB, SA ⁽¹³⁾	120	35	35 ⁽⁴⁷⁾
	Radio 2460 24B8 24B20 24B28B M01	G ⁽¹³⁾ , W, L, MI, NR, ESS ⁽¹¹²⁾	CM, IB, GB, SA	2×80 ⁽¹¹³⁾	35 ⁽¹¹⁴⁾	35
	Radio 2468	G, W, L, MI, NR, ESS ⁽¹¹⁵⁾	CM, IB, GB ⁽¹¹⁶⁾ , SA	2×80	35 ⁽¹¹⁷⁾	35
	Radio 2479 24B8 24B20 24B28B M01	G ⁽¹¹⁸⁾ , W, L, MI, NR, ESS ⁽¹¹²⁾	CM, IB, GB, SA	2×80 ⁽¹¹³⁾	35 ⁽¹¹⁴⁾	35
	Radio 4480 44B8 44B28 C	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×60 ⁽¹⁴⁾⁽¹⁵⁾	35 ⁽¹⁶⁾	35
	Radio 4499 44B8 44B28 C	G ⁽¹³⁾ , W, L, MI	CM, IB, GB, SA	4×60 ⁽¹⁴⁾⁽¹⁷⁾	35 ⁽¹⁶⁾	35
	RD 2243 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	35	35
	RRU 22 ⁽³⁹⁾	W	-	40	10	10
	RRUS 01	G, W, L, MI	CM, IB, GB, SA	80	20 ⁽⁹⁾	20
	RRUS 12	G, W, L, MI	CM, IB, GB, SA ⁽¹¹⁹⁾	2×60	35	25 ⁽¹⁰⁾
RUG	G	-	70	-	-	



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RUS 01	G, W, L, MI	CM, IB, GB, SA	80	20 ⁽⁹⁾	20
	RUS 02	G, W, L, MI	CM, IB, GB, SA	100	35	25 ⁽¹⁰⁾
	Vault Radio System 2268	W, L, MI	CM	2×5	35	35 ⁽⁴⁷⁾
Band 8A	Radio 2219	G, W, L, MI	CM, IB, GB, SA	2×60	20 ⁽¹²⁰⁾	20
	Radio 2468	G ⁽¹³⁾ , W, L, MI	CM, IB, SA	2×80	20	20
	RRUS 12	G, W, L, MI	CM, IB, GB, SA	2×60	26	25 ⁽¹⁰⁾
	RRUS 13	G, W, L, MI	CM, IB, GB, SA	2×60	26	26
	RUS 01	G, W, L, MI	CM, IB, GB, SA	80	20	20
	RUS 02	G, L, MI	CM, IB, GB, SA	80	26	20.8
Band 9	RRU 22 ⁽³⁹⁾	W	-	40	10	10
	RRUS 01	W, L,	CM, IB	60	20	20
Band 11	Radio 2217	W, L, W MI	CM, IB	2×60	20	20
	RRUW 02	W, L, W MI	CM, IB	60	10	10
	RUW 02	W, L, MI	CM, IB	60	10	10
Band 12	mRRUS 12	L, MI	CM	2×5	17	15
	RBS 6501 radio part	L	-	2×5	17	15
	RRUS 11 ⁽¹²¹⁾	L, MI	CM, IB, GB, SA	2×40	17	16.4
	RRUL 11	L, MI	CM	2×30	10	10
	RUS 01	L, MI	CM, IB, GB, SA	60	17	15
Band 12A	Radio 4449 B5 B12A	L, MI	CM, IB, GB ⁽¹²²⁾	4×40 ⁽⁹⁸⁾ 2×60 ⁽⁹⁹⁾	16	15
	Radio 4478	L, MI, NR	CM, IB, GB, SA	4×40 ⁽⁴²⁾	16	15.9
Band 13	mRRUS 12	L, MI	CM, IB, GB	2×5	10	10
	Radio 0208	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	10	10
	Radio 2212	L, MI	CM, IB, GB, SA	2×60	10	10
	Radio 4449 B5 B13 ⁽¹²³⁾	L, MI	CM, GB	4×40 2×60 ⁽¹⁰⁰⁾	10	10
	RBS 6501 radio part	L	-	2×5	10	10
	RD 2242 + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	10	10
	RRUL 11	L, MI	CM	2×30	10	10
	RRUS 11	L, MI	CM, IB, GB, SA	2×40	10	10
	RRUS A2	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	10	10
	RUL 01	L, MI	CM, IB, GB, SA	60	10	10
Band 14	Radio 2203	L, MI	CM, IB	2×5	10	10
	Radio 4478	L, MI	CM, IB, SA	4×40	10	10



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RUS 01	L, MI	CM, IB	60	10	10
Band 17	RD 2242 + IRU 2242 ⁽³⁸⁾	L	-	2×50 mW	11	11
Band 18	RRU 22F2 ⁽¹²⁴⁾	L, MI	CM	2×30	15	15
			CM	2×20	10	10
	RRU 22F3 ⁽⁴⁰⁾	L, MI	CM	2×4	15	15
Band 20	AIR 11 B20A B8P	L, MI	CM, IB, GB	2×30	2×20	2×20
	Radio 2212	L, MI, NR, ESS	CM, IB, GB, SA	2×60	30	30
	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	30	30
	Radio 2238 B8 B20 B28B ⁽¹²⁵⁾	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹³⁾	120	30	30 ⁽⁴⁷⁾
	Radio 2460 24B8 24B20 24B28B M01	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹²⁶⁾	2×40 ⁽¹¹³⁾	30 ⁽³⁴⁾	30
	Radio 2479 24B8 24B20 24B28B M01	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹²⁶⁾	2×40 ⁽¹¹³⁾	30 ⁽³⁴⁾	30
	RRUS 11	L, MI	CM, IB, GB	2×40 ⁽¹²⁷⁾	20	20
	RUS 01	L, MI	CM, IB, GB	80	20	20
Band 25	AIR 1641 B2/25A B66A	L, MI	CM, IB, GB	160 ⁽⁴³⁾	65	60
	AIR 3246 B2 B25	L, MI	CM	160	65	60
	AIR 4455 B2/B25 B66A	W, L, MI	CM, IB, GB, SA	4×30 ⁽²⁰⁾	65	65
	Radio 2203 B2 B25	L, MI, NR, ESS	CM, IB, GB	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾
	Radio 2212 B2 B25	W, L, MI, NR, ESS	CM, IB, GB, SA	2×80	65 ⁽¹²⁸⁾	65
	Radio 4402 B2/B25	L, MI, NR, ESS	CM, IB, GB, SA	2×5	65 ⁽⁵²⁾	65
	Radio 4415 B2 B25	W, L, MI, NR, ESS	CM, IB, GB, SA	4×40	65 ⁽¹²⁹⁾	65
	Radio 4455 B2/B25 B66A	L, MI, NR, ESS	CM, IB, GB, SA	4×30 ⁽⁵⁵⁾	65 ⁽³⁴⁾	65
	Radio 4499 44B2/B25 44B66A	W, L, MI	CM, IB, GB, SA	4×60 ⁽¹³⁰⁾⁽⁵⁶⁾	65 ⁽³⁴⁾	65
	RBS 6501 radio part	L	-	2×5	25	20
	RD 2243 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RD 4442 B25 B66A + IRU 2242 ⁽³⁸⁾	L, MI	CM	2×50 mW	40	40
	RRUS 11	L, C, MI	CM, IB	2×40	20	20
	RRUS 31	L, C, MI	CM, IB	4×40	65	40 ⁽⁴⁷⁾
	RRUS A2	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	40	20
Vault Radio System 2268	L, MI, NR, ESS	CM, IB, GB	2×5	45 ⁽²³⁾	45 ⁽⁴⁷⁾	
Band 26	Radio 4478	W, L, MI	CM, IB, GB, SA	4×40 ⁽¹³¹⁾	35 ⁽¹³²⁾	35
Band 26A	RRUS 11	L, C, MI	CM, IB, SA	2×40 ⁽¹³³⁾	7	7



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
Band 26B	RRUS 11	L, MI	CM, IB	2×40	10	10
Band 26C	RRUS 11	L, MI	CM, IB	2×40	14	14
Band 26D	Radio 0208	L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	21	21 ⁽²²⁾
	Radio 2217	L, MI	CM, IB	2×40	21	21 ⁽⁹⁵⁾
Band 28	Radio 2219	L, MI, NR, ESS	CM, IB, GB	2×80	45 ⁽¹³⁴⁾	45
	Radio 4480 44B0A 44B28 C	L, MI	CM, IB, GB, SA	4×40 ⁽¹⁴⁾⁽¹⁵⁾	45 ⁽¹³⁵⁾	45
	Radio 4480 44B8 44B28 C	L, MI	CM, IB, GB, SA	4×40 ⁽¹⁴⁾⁽¹⁵⁾	45 ⁽¹³⁵⁾	45
	Radio 4499 44B0A 44B28 C	L, MI	CM, IB, GB, SA	4×40 ⁽¹⁴⁾⁽¹⁷⁾	45 ⁽¹³⁵⁾	45
	Radio 4499 44B8 44B28 C	L, MI	CM, IB, GB, SA	4×40 ⁽¹⁴⁾⁽¹⁷⁾	45 ⁽¹³⁵⁾	45
Band 28A	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	30	30 ⁽¹³⁶⁾
	RRUS 12	L, MI	CM, IB, GB	2×40	20	20
	RUS 02	L, MI	CM, IB, GB	60	20	20
Band 28B	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	30	30 ⁽¹³⁶⁾
	Radio 2238 B8 B20 B28B ⁽¹²⁵⁾	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹³⁾	120	30	30 ⁽⁴⁷⁾
	Radio 2460 24B8 24B20 24B28B M01	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹²⁶⁾	2×40 ⁽¹¹³⁾	30 ⁽¹³⁷⁾	30
	Radio 2479 24B8 24B20 24B28B M01	L, MI, NR, ESS	CM, IB, GB, SA ⁽¹²⁶⁾	2×40 ⁽¹¹³⁾	30 ⁽¹³⁷⁾	30
	RRUS 12	L, MI	CM, IB, GB, SA	2×60	25	20
	RUS 02	L, MI	CM, IB, GB, SA	100	25	20
Band 28D	RRU 22F2 ⁽¹²⁴⁾	L, MI	CM	2×20	10	10
				2×10	10	5
	RRU 22F3 ⁽⁴⁰⁾	L, MI	CM	2×4	10	10
Band 28E	Radio 2217	L, MI, NR, ESS	CM, IB, GB	2×40	30 ⁽¹³⁴⁾	30
Band 29	RRUS E2	L, MI	-	2×40	10	10
Band 30	Radio 4415	L, MI	CM	4×25	10	10
	RD 4442 + IRU 2242 ⁽³⁸⁾	L, MI	CM	4×50 mW	10	10
	RRUS 32	L, MI	CM	4×25	10	10
Band 31	RRUS 13 ⁽¹³⁸⁾	L, MI	CM, IB	2×40	5	5
Band 32A	Radio 2012	L	-	2×80	40	40
Band 34	Radio 8842 B34 B39A ⁽¹³⁹⁾	L	-	8×10 ⁽¹⁴⁰⁾	15	15
Band 38	mRRUS 61	L	-	2×5	20	20
	RRUL 62	L	-	2×40	40	40
	RRUL 81	L	-	8×10	40	40



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	RRUS 61	L	-	2×40	20	20
Band 38A	AIR 6468	L	-	80	40	40
	Dot 2272 PPDR1B38A + IRU 8844 or IRU 8884	L	-	2×125 mW	40	40
	Dot 2282 PPDR1B38A + IRU 8844 or IRU 8884	L	-	2×125 mW	40	40
	Radio 4418	L, NR ⁽¹⁴¹⁾	-	4×40	40	40
	Radio 8808 ⁽¹⁴²⁾	L	-	8×15	40	40
	RD 2243 + IRU 2242 ⁽³⁸⁾	L	-	2×125 mW	40	40
	RRUS 72	L	-	4×40	40	40
Band 39	RRUL 81	L	-	8×10	35	35
	RRUS 61	L	-	2×40	20	20
Band 39A	Radio 2218	L	-	2×40	30	30
	Radio 8808 ⁽¹⁴²⁾	L	-	8×10	30	30
	Radio 8842 B34 B39A ⁽¹⁴³⁾	L	-	8×20 ⁽¹⁴⁰⁾	30	30
	RRUL 81	L	-	8×10	30	30
Band 40	AIR 3239	NR	-	100	100	100
	AIR 6468 ⁽¹⁴⁴⁾	L	-	120 ⁽¹⁵³⁾	60	60
	Radio 4412	L	-	4×20	60	60
	RD 2242 + IRU 2242 ⁽³⁸⁾	L	-	2×50 mW	40	40
	RRUS 61	L	-	2×40	20	20
Band 40A	Dot 2272 B3E B40A + IRU 8844 or IRU 8884	L	-	2×125 mW	50	50
	Dot 2282 B3E B40A + IRU 8844 or IRU 8884	L	-	2×125 mW	50	50
	RD 2243 + IRU 2242 ⁽³⁸⁾	L	-	2×125 mW	40	40
	RD 2253 + IRU 2242 ⁽³⁸⁾	L	-	2×125 mW	40	40
	RD 4442 B40A B3 + IRU 2242 ⁽³⁸⁾	L	-	2×125 mW	40	40
	RRU 2216	L	-	2×50	50	50
	RRUL 62	L	-	2×20	40	40
	RRUS 62	L	-	2×50	50	50
Band 40B Band 40C Band 40D	RRUS 61	L	-	2×30	20	20
Band 40N	Radio 4418	L, NR ⁽¹⁴⁵⁾	-	4×40	95	95
Band 40S	RRUS 62	L	-	2×50	50	50
Band 40T	Radio 4412	L	-	4×20	60	60



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ^{(5) (6)} (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	Radio 4418	L, NR (141)	-	4×40	95	95
	RRUS 72	L	-	4×40	60	60
	RD 2243 + IRU 2242	L	-	2×125 mW	40	21
Band 40U	Radio 2218	L	-	2×40	60	60
	Radio 4408	L, NR (146)	-	4×5	90	90
Band 40Y	Radio 8808	L	-	8×20	40	40
Band 41	AIR 6449	L, NR	-	320 ⁽¹⁴⁷⁾	194	160
	AIR 6468 ⁽¹⁴⁴⁾	L	-	120	60	60
	AIR 6488 ⁽¹⁴⁸⁾	L ⁽¹³⁾ , NR	-	200	120	120 ⁽¹⁴⁹⁾
	Radio 4412 ⁽¹⁵⁰⁾	L	-	4×20	60	60
	Radio 4418	L, NR	-	4×40	120	120
	Radio 8863	L, NR	-	8×40	194	120
	RD 2243 + IRU 2242 ⁽³⁸⁾	L	-	2×125 mW	40	40
	RRUS 72	L	-	4×40	60	60
	RRUS 82 ⁽¹⁵¹⁾	L	-	8×20	60 ⁽¹⁵²⁾	60
Band 41A	RRUS 61	L	-	2×40	20	20
Band 41B	RRUS 72	-	-	4×25	50	50
Band 41C	AIR 6468	L	-	120	120	40
	RRUS 61	L	-	2×40	20	20
Band 41D	RRUL 81	L	-	8×10	40	40
	RRUS 62	L	-	2×40	40	40
Band 41E	AIR 6468 ⁽¹⁴⁴⁾	L	-	120 ⁽¹⁵³⁾	60	60
	Radio 8808 ⁽¹⁴²⁾	L	-	8×20	60	60
	Radio 8818 ⁽¹⁴²⁾	L	-	8×30	60	60
	RRU 2208	L	-	2×10	40	40
	RRUL 63	L	-	2×60	60	60
	RRUL 82	L	-	8×15	60	60
Band 41F	RRUL 81	L	-	8×10	40	40
	RRUS 62	L	-	2×40	40	40
Band 41K	AIR 3236	L ⁽¹³⁾ , NR	-	320 ⁽¹⁴⁷⁾	160	160
	AIR 6449	L ⁽¹³⁾ , NR	-	320 ⁽¹⁴⁷⁾	160	160
	AIR 6454	L ⁽¹³⁾ , NR	-	240	160	160
	AIR 6488	NR	-	200	100	100
	Radio 2228	L, NR	-	2×100	120	120



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
	Dot 4479 + IRU 8846	NR	-	4×250 mW	100	100
	Dot 4489 + IRU 8846	NR	-	4×250 mW	100	100
Band 41M	AIR 6488	L ⁽¹³⁾ , NR ⁽¹⁴⁶⁾	-	200	100	100
Band 41N	AIR 6488	L	-	60	50	30 ⁽¹⁵⁴⁾
	Radio 8836	L	-	4×40	50	50
Band 42	AIR 3227	L, NR	-	200	200	200
	AIR 3236	NR	-	320 ⁽¹⁴⁷⁾	200	200
	AIR 6449	NR	-	320 ⁽¹⁵⁵⁾	200	200
	AIR 6468	L	-	120	60	60
	AIR 6488 ⁽¹⁴⁸⁾	L, NR ⁽¹⁵⁶⁾	-	200	100 ⁽¹⁵⁷⁾	100 ⁽¹⁵⁷⁾
	Radio 2218	L	-	2×40	60	60
	Radio 4408	L, NR	-	4×5	150	150
	Radio 8823	L	-	8×20	200	100
Radio 8836	L	-	8×20	200	100	
Band 42B	Radio 2218	L	-	2×38 ⁽¹⁵⁸⁾	40	40
Band 42F	AIR 6488 ⁽¹⁴⁸⁾	L, NR ⁽¹⁴⁶⁾	-	200	100	100
	Radio 4422	L, NR ⁽¹⁴⁶⁾	-	4×40	100	100
Band 42G	AIR 6488 ⁽¹⁴⁸⁾	NR	-	200	100	100
	Radio 8823	NR	-	8×20	190	100
Band 43	AIR 3227	NR	-	200 ⁽¹⁵⁹⁾	200	200
	AIR 6488 ⁽¹⁴⁸⁾	L, NR	-	200	100 ⁽¹⁶⁰⁾	100 ⁽¹⁶⁰⁾
	Radio 4408	L, NR	-	4×5	150	150
	Radio 4422	L, NR ⁽¹⁴⁶⁾	-	4×40	100	100
	Radio 8823	NR	-	8×20	200	100
Band 46A	Radio 2205 B46 ⁽¹⁶¹⁾⁽¹⁶²⁾	L	-	2×316 mW	60	60
Band 46B	Radio 2205 B46 ⁽¹⁶¹⁾	L	-	2×316 mW	60	60
Band 46C	Radio 2205 B46 ⁽¹⁶¹⁾	L	-	2×316 mW	60	60
Band 46D	Radio 2205 B46 ⁽¹⁶¹⁾⁽¹⁶²⁾	L	-	2×316 mW	60	60
Band 48	AIR 6488	L	-	16	100	60
	Radio 2208	L	-	2×10	60	60
	Radio 4408	L	-	4×5	150	120
	RD 4442 + IRU 2242 ⁽³⁸⁾	L	-	4×50 mW	40 ⁽²⁴⁾	40



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ^{(5) (6)} (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
Band 66 (163)	AIR 1641 B2/25A B66A	L, MI	CM, IB, GB	160 ⁽⁴⁵⁾	90	60
	AIR 3246	L, MI	CM, IB, GB	160	90	60
	Radio 0208	W, L, MI	CM, IB, GB, SA	n/a ⁽²¹⁾	70 ⁽¹⁶³⁾	70 ⁽²²⁾
	Radio 4426	W, L, MI, NR, ESS	CM, IB, GB, SA	4×60	90 ⁽¹⁶³⁾	90
Band 66A (164)	AIR 32 B2A B66AA ⁽⁴⁵⁾	W, L, MI	CM, IB, GB, SA	4×30	70 ⁽²⁴⁾⁽¹⁶⁴⁾	65
	AIR 32 B66AA B2P	W, L, MI	CM	4×30	70 ⁽²⁴⁾⁽¹⁶⁴⁾	65
	AIR 32 B66AA B7P LBP	W, L, MI	CM	4×30	70 ⁽²⁴⁾⁽¹⁶⁴⁾	65
	AIR 32 B7A B66AA LBP ⁽⁴⁵⁾	W, L, MI	CM, IB, GB	4×30	70 ⁽²⁴⁾⁽¹⁶⁴⁾	65
	AIR 4455 B2/B25 B66A	W, L, MI	CM, IB, GB, SA	4×30 ⁽²⁰⁾	70	70
	Radio 2203	W, L, MI, NR, ESS	CM, IB, GB	2×5	45	45
	Radio 2212	W, L, MI, NR, ESS	CM, IB	2×80	70 ⁽¹⁶⁴⁾	70
	Radio 2217	W, L, MI, NR, ESS	CM, IB, GB, SA	2×40	45	45
	Radio 4402 B66A	W, L, MI, NR, ESS	CM, IB, GB, SA	4×5	70 ⁽¹⁶⁴⁾	70
	Radio 4415	W, L, MI, NR, ESS	CM, IB, GB, SA	4×40	70 ⁽¹⁶⁴⁾	70
	Radio 4455 B2/B25 B66A	W, L, MI, NR, ESS	CM, IB, GB, SA	4×30 ⁽⁵⁵⁾	70 ⁽³⁴⁾	70
	Radio 4499 44B2/B25 44B66A	W, L, MI	CM, IB, GB, SA	4×60 ⁽¹⁶⁵⁾⁽⁵⁶⁾	70 ⁽³⁴⁾	70
	Radio 8843 B2 B66A	L, MI, NR, ESS	CM, IB, GB	4×60 2×80 ⁽¹⁶⁶⁾	70 ⁽¹⁶⁴⁾	60
	RD 2243 + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RD 4442 B25 B66A + IRU 2242 ⁽³⁸⁾	W, L, MI	CM	2×50 mW	40	40
	RRUS 32	W, L, MI	CM, IB, GB, SA	4×40	70 ⁽²⁴⁾⁽¹⁶⁴⁾	65
	Vault Radio System 2268	W, L, MI, NR, ESS	CM, IB, GB	2×5	45	45
Band 70	Radio 4415	L, MI	CM, IB, GB, SA	4×40	25	25
Band 71	Radio 4449 B71 B85A	L, MI, NR, ESS	CM, IB, GB	4×40	35	35
	Radio 4478	L, MI, NR, ESS	CM, IB, GB, SA	4×40	35	35
Band 77A	Radio 8836	NR	-	8×20	100	100
Band 78A	Dot 4479 + IRU 8846	NR	-	4×250 mW	100	100
	Dot 4489 + IRU 8846	NR	-	4×250 mW	100	100
Band 78C	AIR 3239	NR	-	100	100	100
	Radio 4422	NR	-	4×40	100	100



Band ⁽¹⁾⁽²⁾	Radio	Supported Radio Standards ⁽³⁾	MI Support ⁽⁴⁾	Max. Output Power ⁽⁵⁾⁽⁶⁾ (W)	IBW (MHz)	Operational Bandwidth ⁽⁷⁾ (MHz)
Band 78F	AIR 3239	NR	-	100	100	100
Band 78G	AIR 3239	NR	-	100	100	100
	Radio 4422	NR	-	4×40	100	100
Band 78H	AIR 6488	NR	-	200	100	100
Band 78K	Radio 8863	NR	-	8×40	200	200
Band 78L	Dot 4479 + IRU 8846	NR	-	4×250 mW	100	100
	Dot 4489 + IRU 8846	NR	-	4×250 mW	100	100
Band 78Q	AIR 3239	NR	-	100	100	100
Band 85A	Radio 4449 B71 B85A	L, MI	CM, IB, SA	4×40	17	15.36 ⁽¹⁶⁷⁾
Band 111	Radio 0208 BH	MI	SA	n/a ⁽²¹⁾	5	5
	RRUS E2 B29	MI	SA	2×40	10	10
Band 222	Radio 0208 BH	MI	SA	n/a ⁽²¹⁾	5	5
	Radio 4415 B70	MI	SA	4×40	25	25
Band 257	AIR 1281	NR	-	400 ⁽¹⁷⁰⁾	3000	800 ⁽¹⁷¹⁾
	Streetmacro 6701	NR	-	400 ⁽¹⁷⁰⁾	3000	800 ⁽¹⁷¹⁾
Band 257A	AIR 5121	NR	-	400	850	400
Band 258B	AIR 1281	NR	-	400 ⁽¹⁷⁰⁾	1000	800 ⁽¹⁷¹⁾
	Streetmacro 6701	NR	-	400 ⁽¹⁷⁰⁾	1000	800 ⁽¹⁷¹⁾
Band 260	AIR 1281	NR	-	200 ⁽¹⁷⁰⁾⁽¹⁶⁸⁾	3000	800 ⁽¹⁷¹⁾
	AIR 5331	NR	-	200	3000	800
	Streetmacro 6701 ⁽¹⁶⁹⁾	NR	-	200	3000	400
Band 261	AIR 1281	NR	-	200 ⁽¹⁷⁰⁾	850	800 ⁽¹⁷¹⁾
	Streetmacro 6701	NR	-	400 ⁽¹⁷⁰⁾	850	800 ⁽¹⁷¹⁾
PPDR1	Dot 2272 PPDR1B38A + IRU 8844 or IRU 8884	L, MI	CM, IB	2×125 mW	3	3
	Dot 2282 PPDR1B38A + IRU 8844 or IRU 8884	L, MI	CM, IB	2×125 mW	3	3

(1) For information on radio bands, see [Table 4](#)

(2) For information on the multi-band radios combined capabilities, see [Supported Radio Capabilities](#).

(3) ESS (Ericsson Spectrum Sharing) is a software feature.

(4) Lists support for the following standards: MI Cat-M1 (CM), MI NB-IoT in-band (IB), MI NB-IoT guard band (GB), and MI NB-IoT standalone (SA).

(5) Requires HWACs (not valid for RUG).

(6) For information on possible power back off or band edge loss, contact Ericsson Technical Sales Support.

(7) Operational bandwidth is the actual bandwidth allocated for carriers.

(8) Mixed mode W+L is not supported.

(9) For GSM: The IBW is dependent on modulation techniques for RUS 01 and RRUS 01. See [IBW for RUS 01 and RRUS 01 Depending on GSM Modulation Technique](#) on page 32



- (10) Up to four CDMA or GSM carriers. Maximum 20 MHz available for LTE and WCDMA carriers.
- (11) B0 and B0A have the same uplink and downlink frequency range. B0A has more out of band attenuation than B0, providing extra protection towards other frequency bands.
- (12) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 25 MHz IBW for maximum 13 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.5 MHz IBW for GSM single mode. Maximum one LTE carrier in single mode if 1.4 MHz and 3 MHz. See [Virtual IBW](#) on page 35 for more information.
- (13) Only supported in mixed mode.
- (14) Maximum 20 W per 1.4 MHz and 3 MHz LTE, GSM and NB-IoT standalone carrier.
Maximum 40 W per WCDMA and 4.6–5 MHz LTE carrier.
Maximum 60 W per carrier > 5 MHz.
- (15) For Radio 4480 band 0A + band 28,
band 1 + band 3,
band 8 + band 28:
Maximum 100 W per carrier for both bands with fan.
Maximum 80 W per carrier for both bands without fan.
- (16) 20 MHz IBW per RF port for 1.4 MHz and 3 MHz LTE, GSM and NB-IoT standalone carriers.
- (17) For Radio 4499 B0A + B28 and band 8 + band 28:
Maximum 80 W per carrier for both bands.
- (18) RRUS 02 B0A is a full band radio, providing extra protection from CDMA interference below 888.4 MHz.
- (19) Radio supports Virtual IBW up to 40 MHz. See [Virtual IBW](#) on page 35 for more information.
- (20) Up to 30 W per port for each band. (Band 2 and Band 25 are considered as one band.)
Maximum 40 W per port for both bands.
- (21) Radio 0208, RRUS A2 and RRUS A3 are not TX-capable. When used in an RBB together with a TX-capable radio, the output power of the RBB is that of the TX-capable radio.
- (22) Operational bandwidth as supported by radio. Actual operational bandwidth is limited to that of the TX-capable radio.
- (23) [Virtual IBW](#) on page 35 for more information.
- (24) Radio supports Virtual IBW up to full band. See [Virtual IBW](#) on page 35 for more information.
- (25) Radio 2217 B1, KRC 161 490/1 R1A and KRC 161 490/2 up to R1B, supports 40 MHz IBW and operational bandwidth.
- (26) Mixed mode W+NR is not supported.
- (27) For mixed mode.
- (28) Maximum 20 W per NB-IoT standalone carrier.
Maximum 80 W per carrier \geq 5 MHz.
- (29) 40 MHz IBW per RF port for NB-IoT standalone.
- (30) NB-IoT standalone: 20 MHz IBW per RF port with maximum 20 W per carrier.
Mixed Mode: 20 MHz IBW for NB-IoT standalone carriers.
- (31) 20 W per port for each band. 40 W per port for both bands.
- (32) For Radio 4443 B1 B3:
Maximum 320 W for both bands together.
NB-IoT standalone: 20 MHz IBW
- (33) Maximum 40 W per WCDMA and 5 MHz LTE carriers.
Maximum 60 W per carrier > 5 MHz.
- (34) 20 MHz IBW per RF port for NB-IoT standalone.
- (35) Maximum 40 W per WCDMA, LTE and 5 MHz NR carrier.
Maximum 60 W per carrier > 5 MHz.
- (36) For Radio 4499 band 1 + band 3:



Maximum 80 W per carrier for both bands together.

Maximum 20 W per 1.4 MHz and 3 MHz LTE, GSM and NB-IoT standalone carrier.

Maximum 40 W per WCDMA and 4.6–5 MHz LTE carrier.

Maximum 60 W per carrier > 5 MHz.

(37) For Radio 4499 band 1 + band 7:

Maximum 100 W per carrier for both bands together.

Maximum 20 W per NB-IoT standalone carrier.

Maximum 40 W per WCDMA, LTE and 5 MHz NR carrier.

Maximum 60 W per carrier > 5 MHz.

(38) See [Radio Dot System](#) on page 36 for information on RDS configurations.

(39) RRU 22 is an RBS 3000 legacy product.

(40) RRU 22F3 is a triple band radio for band 1A, 18 and 28D.

(41) 80 W per port per band. 80 W per port for two bands together.

(42) Maximum 20 W per NB-IoT standalone carrier.

(43) For band 2 + band 25:

Maximum 160 W output power.

For band 2 + band 66, band 25 + band 66 and band 2 + band 25 + band 66:

Maximum 320 W output power.

(44) For GSM: The instantaneous bandwidth is limited to 15 MHz.

(45) Radio is of type AIR 32 MB with dual active bands.

(46) 1.4 MHz LTE, 3 MHz LTE and GSM carriers within 20 MHz.

(47) 1.4 or 3 MHz LTE carriers within 25 MHz. All other carriers within 40 MHz IBW when using 1.4 or 3 MHz LTE carriers.

(48) For Radio 2212 B2 B25 with R-state < R5:

LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. 40 MHz IBW with LTE carriers > 3 MHz.

Maximum 40 W per 1.4 and 3 MHz carriers.

Mixed Mode: 40 MHz IBW if one or more 1.4 or 3 MHz LTE carriers.

(49) GSM single mode: 40 MHz IBW per RF port. Maximum 20 W per carrier for up to 40 MHz IBW.

LTE single mode: 40 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 20 W per 1.4 and 3 MHz carriers.

NB-IoT standalone: 40 MHz IBW.

Mixed Mode: 40 MHz IBW for GSM with maximum 20 W per carrier. 60 MHz IBW with maximum 13.3 W per GSM carrier and GSM carriers in both edges of the band. 40 MHz IBW for 1.4 and 3 MHz LTE carriers per RF port.

Maximum 40 W per 1.4 and 3 MHz LTE carrier.

(50) LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Max 20 W per carrier for 1.4 and 3 MHz carriers. Maximum one carrier in single mode if the carrier bandwidth is 1.4 or 3 MHz.

Mixed Mode: 20 MHz IBW for GSM with max 20 W per GSM, 1.4 MHz and 3 MHz LTE carriers. 40 MHz IBW with 13 W per GSM carrier, WCDMA and LTE carriers 5 MHz or higher.

(51) Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. See [Virtual IBW](#) on page 35 for more information.

(52) 20 MHz IBW per RF port for 1.4 MHz and 3 MHz LTE carriers and NB-IoT standalone.

(53) For Radio 4415 B2 B25 on band 2 with R-state R1:

LTE single mode: 20 MHz IBW and maximum 20 W for 1.4 and 3 MHz carriers.

NB-IoT standalone: 20 MHz IBW per RF port.

Mixed mode: 40 MHz IBW per RF port. 20 MHz IBW and maximum 20 W for 1.4 and 3 MHz LTE carriers.

(54) For Radio 4415 B2 B25 on band 2 with R-state > R1:

GSM single mode: 20 MHz IBW per RF port.

LTE single mode: 20 MHz IBW and maximum 20 W for 1.4 and 3 MHz carriers.



- NB-IoT standalone: 20 MHz IBW per RF port.
- Mixed mode: 20 MHz IBW for GSM with maximum 20 W per GSM carrier and 1.4 and 3 MHz LTE carriers. 40 MHz IBW with 6.6W per GSM carrier and 5 MHz LTE carriers or higher. 20 MHz IBW for 1.4 and 3 MHz LTE carriers.
- (55) Up to 30 W per port for each band. Maximum 40 W per port for multiband.
- (56) For mixed mode band 2 + band 25:
Maximum 60 W per carrier for both bands.
For mixed mode band 2 + band 66A, band 5 + band 66A and band 2 + band 25 + band 66A:
Maximum 100 W per carrier for both bands.
- (57) Maximum 320 W in total together with band 66A.
High output power mode 2×60 W supported on RF ports A and D.
- (58) For GSM: The maximum power of radios with two carriers is 60 W per radio (30 W per carrier).
- (59) For GSM: Instantaneous Bandwidth is limited to 10 MHz at output power larger than 60 W.
- (60) Mixed mode G+W is not supported.
- (61) For AIR 2488 B3A B1P B7P with KRD 901 048/1, mixed mode G+L is supported from R-state R1C.
For AIR 2488 B3A B7P with KRD 901 048/2, mixed mode G+L is supported from R-state R1B.
For AIR 2488 B1A B3A B7P with KRD 901 048/4, mixed mode G+L and G+NR are supported from R-state R1C.
- (62) 1.4 MHz LTE, 3 MHz LTE and GSM carriers within 20 MHz IBW. All other carriers within 40 MHz IBW when using 1.4 MHz, 3 MHz LTE, or GSM carriers.
- (63) For AIR 2488 B3A B1P B7P with KRD 901 048/1, mixed mode G+ESS is not supported.
- (64) For AIR 4455 B1 B3 on band 3:
GSM single mode: 20 MHz IBW per RF port
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. 70 MHz IBW with 5 MHz LTE carriers or higher.
Mixed Mode: 20 MHz IBW for GSM with maximum 20 W per GSM, 1.4 MHz and 3 MHz LTE carrier. 6.6 W per GSM carrier with IBW above 20 MHz.
- (65) For Radio 2212 B3 up to R5:
GSM single mode: 20 MHz IBW per RF port. Maximum 20 W per carrier. Supports Virtual IBW.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 40 W per carrier for 1.4 and 3 MHz carriers.
Mixed Mode: 20 MHz IBW for GSM with maximum 20 W per GSM carrier. 75 MHz IBW with 6.6 W per GSM carrier. 20 MHz IBW for LTE 1.4 MHz and 3 MHz LTE carriers with maximum 40 W per carrier.
- (66) For Radio 2212 B3 from R5:
GSM single mode: 40 MHz IBW per RF port. Maximum 20 W per carrier. Supports Virtual IBW.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 40 W per carrier for 1.4 and 3 MHz carriers.
Mixed Mode: 40 MHz IBW for GSM with maximum 20 W per GSM carrier. 75 MHz IBW with 6.6 W per GSM carrier. 20 MHz IBW for LTE 1.4 MHz and 3 MHz LTE carriers with maximum 40 W per carrier.
- (67) 1.4 and 3 MHz LTE carriers within 20 MHz IBW.
- (68) The following applies to Radio 2219 B3 with KRC 161 619/1, up to, but not including, R2:
Radio supports 40 MHz IBW and operational bandwidth.
20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 40 MHz IBW for maximum 13 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.8 MHz IBW for GSM single mode.
- (69) The following applies to Radio 2219 B3 with KRC 161 619/1, R2 and higher:
20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 55 MHz IBW for maximum 13 W on all GSM carriers and up to 28 MHz IBW



for 20 W on one or more GSM carriers. Up to 12.8 MHz IBW for GSM single mode. See [Virtual IBW](#) on page 35 for more information.

- (70) 40 MHz IBW per RF port for GSM, 1.4 MHz LTE, and 3 MHz LTE carriers. Virtual IBW up to full band.
- (71) Mixed mode G+NR is not supported.
- (72) Maximum 20 W per GSM and NB-IoT standalone carrier.
Maximum 30 W per carrier 1.4 MHz and 3 MHz LTE carrier.
Maximum 80 W per carrier ≥ 5 MHz.
- (73) 20 MHz IBW per RF port for GSM carrier.
- (74) For Radio 4415 B3 KRC 161 637/1 and KRC 161 637/2 with R-state \geq R5:
GSM single mode: 20 MHz IBW per RF port.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. 75 MHz IBW for 5 MHz carrier bandwidths and higher.
Mixed Mode: 20 MHz IBW for GSM with maximum 20 W per GSM, 1.4 MHz and 3 MHz LTE carriers. IBW above 20 MHz with maximum 6.6 W per GSM carrier, 75 MHz IBW for 5 MHz LTE carriers and higher.
Virtual IBW within the existing IBW.
- (75) For Radio 4415 B3 KRC 161 637/1 with R-state $<$ R5:
GSM single mode: 20 MHz IBW per RF port.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. 70 MHz IBW for 5 MHz carrier bandwidths and higher.
Mixed Mode: 20 MHz IBW for GSM with maximum 20 W per GSM, 1.4 MHz and 3 MHz LTE carriers. 40 MHz IBW with maximum 6.6 W per GSM and 5 MHz LTE carriers or higher.
Virtual IBW within the existing IBW.
- (76) For Radio 4415 B3, KRC 161 637/2 with R-state $<$ R5:
GSM single mode: 20 MHz IBW per RF port.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. 70 MHz IBW for 5 MHz carrier bandwidths and higher.
Mixed Mode: 20 MHz IBW for GSM with maximum 20 W per GSM, 1.4 MHz and 3 MHz LTE carriers. 40 MHz IBW with maximum 6.6 W per GSM and 5 MHz LTE carriers or higher. 50 MHz IBW with 20 W per GSM and 15 MHz LTE carriers, valid only with 15 MHz LTE carriers and one GSM carrier per RF port.
Virtual IBW within the existing IBW.
- (77) GSM single mode: 20 MHz IBW per RF port. Maximum 20 W per carrier.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 30 W per carrier.
NB-IoT standalone: 20 MHz IBW per RF port. Maximum 20 W per carrier.
Mixed Mode: 20 MHz IBW for GSM, NB-IoT standalone, 1.4 MHz and 3 MHz LTE. Maximum 20 W per GSM and NB-IoT standalone carrier. Maximum 30 W per 1.4 MHz and 3 MHz LTE carrier.
- (78) LTE single mode: 40 MHz IBW for 1.4 and 3 MHz carriers per RF port.
- (79) For Radio 4443 B1 B3 on band 3:
Maximum 320 W for both bands together.
GSM: 20 MHz per port. Supports Virtual IBW.
LTE: Maximum 32 W for 1.4 and 3 MHz carriers.
- (80) 20 MHz IBW per RF port for GSM and NB-IoT standalone carriers.
- (81) For NB-IoT standalone: 20 MHz IBW per RF port.
- (82) Maximum 20 W per 1.4 MHz and 3 MHz LTE, GSM and NB-IoT standalone carrier.
Maximum 40 W per WCDMA and 4.6–5 MHz LTE carrier.
Maximum 60 W per carrier $>$ 5 MHz.
- (83) For GSM: The instantaneous bandwidth is limited to 15 MHz when the output power is larger than 60 W.



- (84) G+W is not supported.
- (85) For RRUS 12 with KRC 161 282/3, W+L is supported.
- (86) For RRUS 13 with KRC 161 469/4, G+W is not supported.
- (87) 45 MHz IBW for LTE single mode only. 40 MHz IBW applies to all other configurations.
- (88) 5 MHz contiguous IBW for single mode GSM
- (89) Maximum 60 MHz for LTE plus two GSM carriers.
- (90) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 45 MHz IBW for maximum 13 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.8 MHz IBW for GSM single mode. Maximum 20 W per carrier for 1.4 and 3 MHz LTE. See [Virtual IBW](#) on page 35 for more information.
- (91) For Radio 2242 B1B B3A:
Does not support 1.4 MHz LTE carriers.
Mixed Mode: 40 MHz IBW for GSM and 3 MHz LTE carriers.
- (92) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 40 MHz IBW for maximum 13 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.8 MHz IBW for GSM single mode. Maximum 20 W per carrier for 1.4 and 3 MHz LTE. See [Virtual IBW](#) on page 35 for more information.
- (93) LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 20W per carrier.
- (94) GSM single mode: 20 MHz IBW per RF port. Maximum 20 W per carrier.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 20W per carrier.
NB-IoT standalone: 20 MHz IBW per RF port. Maximum 20 W per carrier.
Mixed Mode: 20 MHz IBW for GSM, NB-IoT standalone, 1.4 MHz and 3 MHz LTE. Maximum 20 W per GSM, NB-IoT standalone, 1.4 MHz and 3 MHz LTE carrier.
- (95) 1.4 and 3 MHz LTE carriers within 20 MHz IBW.
- (96) 45 MHz IBW with one 20 MHz LTE carrier combined with one WCDMA carrier. 20 MHz IBW with 1.4 and 3 MHz LTE carriers. 40 MHz IBW apply to all other configurations.
- (97) 20 MHz IBW per RF port for 1.4 MHz and 3 MHz LTE, GSM carriers and NB-IoT standalone.
Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 25 MHz IBW for maximum 13 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.8 MHz IBW for GSM single mode. Maximum 20 W per carrier for 1.4 and 3 MHz LTE. Maximum one LTE carrier in single mode if 1.4 or 3 MHz carrier. See [Virtual IBW](#) on page 35 for more information.
- (98) 5 MHz LTE carrier of upper edge of band 5 (889-894 MHz) and lower edge of band 12A (729-734 MHz) is restricted to 40 W.
-
- (99) High output power mode 2×60 W supported on RF A and RF C on both bands.
Power mode 4×40 W or 2×60 W supported per band.
Mixed power mode supported in all possible combinations of output power, with 4×40 W or 2×60 W on band 5 and 4×40 W or 2×60 W on band 12A.
- (100) High output power mode 2×60 W supported on RF A and RF D on both bands.
Power mode 4×40 W or 2×60 W supported per band.
Mixed power mode only supported with 4×40 W on band 5 in combination with 2×60 W on band 13.
- (101) Maximum 20 W per carrier and 20 MHz IBW for 1.4 and 3 MHz LTE carriers.
- (102) Maximum 60 W per GSM, 1.4 MHz, or 3 MHz LTE carrier.
- (103) Up to three CDMA carriers supported if LTE is configured with 20 MHz bandwidth in total.
- (104) Radio 2212 B7 supports up to two 10, 15, and 20 MHz LTE carriers.
- (105) 50 MHz IBW/operational bandwidth supported on Radio 2217 B7 KRC 161 428/1 and KRC 161 428/2, R2A and higher, otherwise IBW/operational bandwidth is 40 MHz.
- (106) Maximum 40 W per LTE and 5 MHz NR carrier.
Maximum 60 W per carrier > 5 MHz.



- (107) Radio 2212 B8 supports 1.4, 3, 5, 10, and 15 MHz LTE carrier bandwidths.
- (108) GSM single mode: 20 MHz IBW per port.
- (109) Maximum 20 W per carrier, for 1.4 and 3 MHz LTE carriers.
- (110) GSM single mode: 20 MHz IBW per RF port. Maximum 20 W per carrier.
LTE single mode: 20 MHz IBW for 1.4 and 3 MHz carriers per RF port.
Mixed Mode: 20 MHz IBW for GSM carriers with maximum 20 W per GSM carrier. 45 MHz IBW with 6.6 W per GSM carrier. 20 MHz IBW for 1.4 and 3 MHz LTE carriers.
- (111) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 35 MHz IBW for maximum 10 W on all GSM carriers and up to 20 MHz IBW for 20 W on one or more GSM carriers. Up to 12.5 MHz IBW for GSM single mode in downlink on one RF port. Maximum 20 W per carrier for 1.4 and 3 MHz LTE. Maximum one LTE carrier in single mode if 1.4 or 3 MHz carrier. See [Virtual IBW](#) on page 35 for more information.
- (112) G+NR and G+ESS are supported from SW 20.Q1
- (113) For mixed mode band 8 + band 20, maximum 2×120 W.
For mixed mode band 8 + band 28B, maximum 2×40 W for band 28B, maximum 2×80 W for band 8.
For mixed mode band 20 + band 28B, maximum 4×40 W.
For mixed mode band 8 + band 20 + band 28B, maximum 2×40 W for band 28B, maximum 2×120 W for band 8 and band 20.
- (114) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE, and NB-IoT standalone.
- (115) For radio 2468 with KRC 161 728/1, mixed mode L+ESS is not supported.
- (116) Radio 2468 supports MI NB-IoT guard band from SW 19.Q1.
- (117) GSM single mode: 23 MHz IBW per RF port.
NB-IoT standalone: 20 MHz IBW per RF port.
Mixed mode: 23 MHz IBW per RF port for GSM with maximum 20 W per carrier. 35 MHz IBW per RF port for GSM with maximum 6.6 W per carrier. 20 MHz IBW per RF port for NB-IoT standalone. 20 MHz IBW per RF port for LTE with maximum 40 W per 1.4 and 3 MHz carrier.
- (118) For Radio 2479, GSM single mode is supported on band 8 from SW 20.Q1.
- (119) RRUS 12 B8 KRC 161 262/3 does not support MI EC-GSM-IoT.
- (120) 20 MHz IBW per RF port for GSM, 1.4 MHz and 3 MHz LTE carriers. Virtual IBW for GSM, 1.4 MHz and 3 MHz LTE carriers within the existing IBW. Up to 12.8 MHz IBW for GSM single mode. Maximum 20 W per carrier for 1.4 and 3 MHz LTE. Maximum one LTE carrier in single mode if 1.4 or 3 MHz carrier. See [Virtual IBW](#) on page 35 for more information.
- (121) RRUS 11 for band 12 supports 1.4, 3, 5, 10, and 15 MHz LTE carriers.
- (122) For Radio 4449 B5 B12A, when using the bottom channel of band 12A for NB-IoT guard band, performance might be degraded on this channel.
- (123) For information on how to set up virtual RF ports refer to [Manage Hardware Equipment](#).
- (124) RRU 22F2 is a dual band radio for band 18 and 28D.
- (125) For Radio 2238 mixed mode dual band, Band 20 or Band 28B can only be mixed together with Band 8.
- (126) Supported only in mixed mode.
- (127) The given output power is for RRUS 11 B20 with product number KRC 118 91/2. For RRUS 11 B20 with product number KRC 118 91/1, the output power is limited to 2×30 W.
- (128) LTE single mode: 40 MHz IBW for 1.4 and 3 MHz carriers per RF port. Maximum 40 W per carrier for 1.4 and 3 MHz carriers.
NB-IoT standalone: 20 MHz IBW.
Mixed Mode: 20 MHz IBW for 1.4 and 3 MHz LTE carriers per RF port. Maximum 40 W per 1.4 and 3 MHz LTE carrier.
- (129) For Radio 4415 B2 B25 on band 25:
For KRC 161 636/1 R-state ≥ R2 and KRC 161 636/3 R-state ≥ R5: 20 MHz IBW for GSM.



- For KRC 161 636/1 R-state < R2 and KRC 161 636/3 R-state < R5: 20 MHz IBW for LTE single mode and maximum 20 W for 1.4 and 3 MHz carriers.
- NB-IoT standalone: 20 MHz IBW per RF port.
- Mixed mode: 40 MHz IBW per RF port. 20 MHz IBW and maximum 20 W for 1.4 and 3 MHz LTE carriers.
- (130) Maximum 20 W per 1.4 MHz and 3 MHz LTE and NB-IoT standalone carrier.
Maximum 40 W per WCDMA and 4.6–5 MHz LTE carrier.
Maximum 60 W per carrier > 5 MHz.
- (131) Maximum 20 W per NB-IoT standalone and 1.4 MHz and 3 MHz LTE carriers.
- (132) 20 MHz IBW for NB-IoT standalone and 1.4 MHz and 3 MHz LTE carriers.
- (133) The given output power is for RRUS 11 B26A with product number KRC 161 287/2. For RRUS 11 B26A with product number KRC 161 287/1, the output power is limited to 2×30 W.
- (134) 3 MHz LTE carriers within 20 MHz IBW. Maximum 20 W per RF branch for 3 MHz LTE carriers.
- (135) 20 MHz IBW per RF port for NB-IoT standalone and 1.4 MHz and 3 MHz LTE carrier.
- (136) 3 MHz LTE carriers within 20 MHz IBW.
- (137) 20 MHz IBW per RF port for 1.4 MHz and 3 MHz LTE and NB-IoT standalone.
- (138) In addition to standard LTE carrier bandwidths, RRUS 13 B31 supports 4.2 and 4.4 MHz LTE carriers.
- (139) Radio 8842 B34 B39A on band 34 only supports 10 and 15 MHz LTE carriers.
- (140) Maximum 30 W per RF branch in total for both bands. Maximum 3 carriers per RF branch in total for both bands. In multi-sector per radio 2×4TX/4RX and 4×2TX/2RX, all sectors must have the same carrier configuration.
- (141) For radio 4418, L+NR is supported from R-state R1C.
- (142) Radio 8808 and Radio 8818 does not support 5 MHz LTE carriers.
- (143) Radio 8842 B34 B39A on band 39A only supports 10 and 20 MHz LTE carriers.
- (144) AIR 6468 on band 41E supports 20 MHz LTE carriers.
- (145) Radio 4418 with KRC 161 706/6 does not support NR.
- (146) L+NR is not supported.
- (147) Maximum output power 2 W per MHz.
- (148) For split mode.
- (149) 20 MHz carrier is supported.
From SW 19.Q2, for NR + LTE split mode, NR 40 MHz + LTE 60 MHz carriers are supported.
- (150) Radio 4412 B41 supports 10, 15, and 20 MHz LTE carriers.
- (151) RRUS 82 for band 41 does not support 5 MHz LTE carriers.
- (152) Radio supports Virtual IBW up to 60 MHz. See [Virtual IBW](#) on page 35 for more information.
- (153) Minimum output power is 20 W per carrier.
- (154) Only carrier combination 10 MHz + 20 MHz is supported.
- (155) Maximum output 2 W per MHz up to 160 MHz. Maximum output 320 W above 160 MHz
- (156) For AIR 6488, L+NR is supported with split mode from SW 20.Q1.
- (157) For AIR 6488 band 42 with KRD 901 097/11:
100 MHz IBW and 100 MHz operational bandwidth without split mode.
200 MHz Virtual IBW and 160 MHz operational bandwidth with split mode.
For AIR 6488 band 42 with KRD 901 159/11:
100 MHz IBW and 100 MHz operational bandwidth without split mode.
200 MHz Virtual IBW and 80 MHz operational bandwidth with split mode.
- (158) Radio 2218 B42B with KRC 161 647/1 supports output power of maximum 2×30 W.
- (159) Maximum 5 W output power per MHz for contiguous spectrum operation.
Maximum 4 W output power per MHz for non-contiguous spectrum operation.
- (160) 100 MHz IBW and 100 MHz operational bandwidth without split mode.
200 MHz Virtual IBW and 160 MHz operational bandwidth with split mode.



- (161) Radio 2205 B46 with KRC 161 609/2 support band 46A (5160–5250 MHz), band 46B (5250–5340 MHz), band 46C (5480–5710 MHz), and band 46D (5735–5875 MHz).
- (162) Radio 2205 B46 with KRC 161 609/1 support band 46A (5155.75–5250 MHz) and band 46D (5725–5875 MHz).
- (163) Upper 45 MHz of band 66 is for LTE only.
- (164) Upper 25 MHz of band 66A is for LTE only.
- (165) Maximum 20 W per NB-IoT standalone carrier.
 - Maximum 40 W per WCDMA and 4.6–5 MHz LTE carrier.
 - Maximum 60 W per carrier > 5 MHz.
- (166) Maximum 320 W in total together with band 2.
 - High output power mode 2×80 W supported on RF ports E and H.
- (167) Including two NB-IoT standalone carriers.
- (168) 200 W EIRP for AIR 1281 with KRD 901 166/4 which only supports configuration mode 2.
- (169) Only supports configuration mode 2.
- (170) 200 W EIRP for configuration mode 1.
 - 400 W EIRP for configuration mode 2.
- (171) 800 MHz operational bandwidth for configuration mode 1.
 - 400 MHz operational bandwidth for configuration mode 2.

1.2 Mixed Mode Radio Configuration Rules

The following rules apply to mixed mode configurations:

- 1 Single Standard Mixed Mode (SSMM) configurations are only supported if the standard is supported in single mode.
 - SSMM G + G is only supported with DU radio node.
 - SSMM W + W is not supported with two DU radio nodes.
- 2 Multistandard Mixed Mode (MSMM) G + NB IoT SA is only supported if both GSM and NB-IoT SA are supported in single mode.
- 3 MSMM G + W cannot be supported with a third standard on RF port per band in downlink.
- 4 MSMM NB-IoT SA + G/W + NR/ESS⁽¹⁾ is not supported on RF port per band in downlink (these configurations are not supported in 3GPP).
- 5 In downlink, all standard combinations are supported on RF port or band except combinations stated in [2](#), [3](#) and [4](#).
- 6 In uplink, there are no limitations in terms of supported standard combinations per RF port.
- 7 In downlink for multiband radios sharing RF port, there are no limitations for supported RATs with the combination of all bands. Rules above for each individual band apply.

(1) ESS is a software feature. For more information, see [Radio Configurations for ESS](#).



1.3 Naming Convention for Multiband Radios

There are two types of naming conventions for the multiband radios.

1.3.1 Naming Convention 1 for Multiband Radios

Some multiband radios are named as follows:

Radio <Radio TX/RX> <Unique ID> <1st 3GPP Band> <2nd 3GPP Band> <3rd 3GPP Band> .

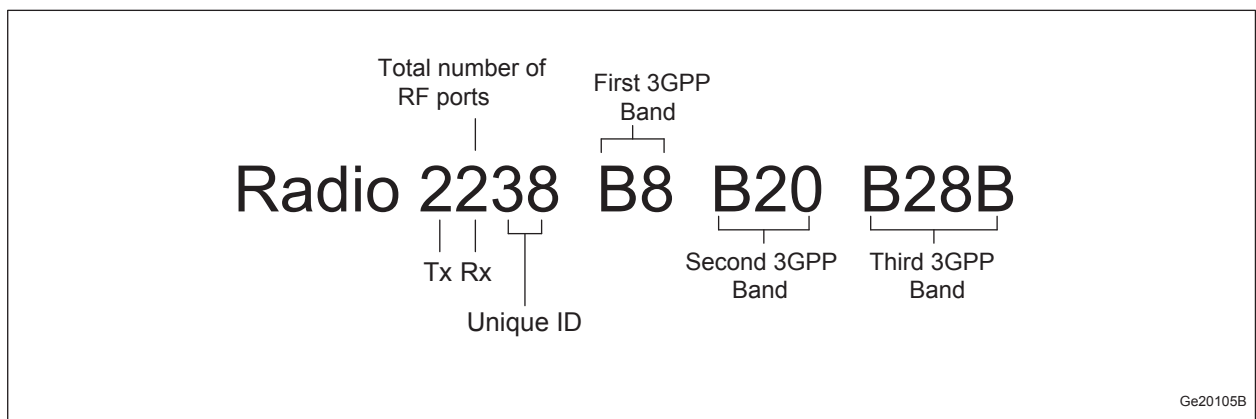


Figure 1 Naming Convention Example One

1.3.2 Naming Convention 2 for Multiband Radios

Some multiband radios are named as follows:

Radio <Radio TX/RX> <Unique ID> <<TX/RX>< 1st 3GPP Band>> <<TX/RX><2nd 3GPP Band>> <<TX/RX>< 3rd 3GPP Band>> <Port Configuration>.

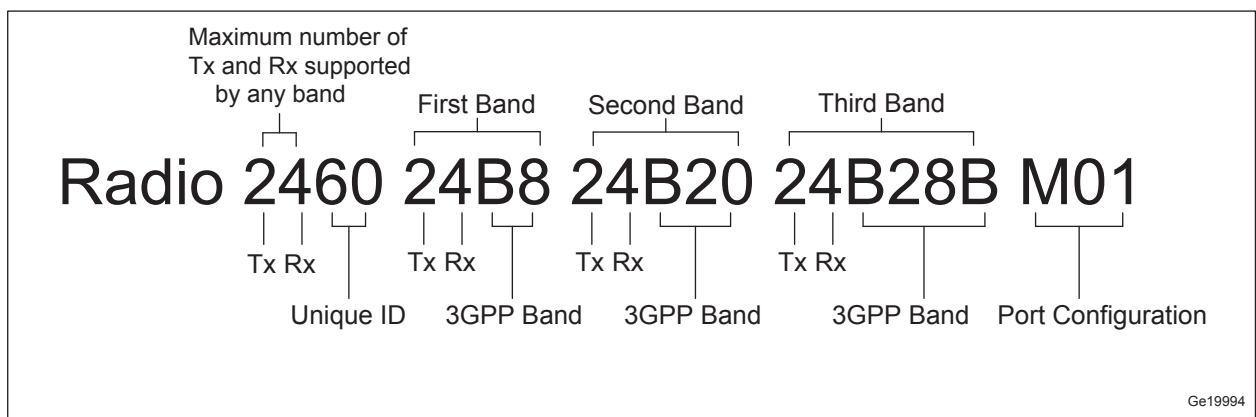


Figure 2 Naming Convention Example Two



Port Configuration

S - Separate ports for all bands

C - Combined for all bands

Mxx - Mix of combined and separated ports. Different combinations are distinguished by a two-digit number. For information on multiband radio variant naming, see [Table 2](#)

Table 2 Variant Naming for Multiband Radios

Variant	Band 1	Band 2	Band 3	Supported Radios
M01	RF A: TX/RX RF B: TX/RX RF C: RX RF D: RX	RF A: TX/RX RF B: TX/RX RF C: RX RF D: RX	RF A: RX RF B: RX RF C: TX/RX RF D: TX/RX	Radio 2460 Radio 2479

1.4 Supported DUs and Baseband Units

Table 3 Supported DUs and Baseband Units

DU / Baseband	Supported RATs	Mixed Mode Baseband Configurations	Comments
Baseband 5212 (6 ports) Baseband 6303 (3 ports) Baseband 6620 (15 ports)	G, W, L, NB-IoT	G+W	-
Baseband 5216 (6 ports) Baseband 6318 (6 ports) Baseband 6630 (15 ports)	G, W, L, NR, NB-IoT	G+W G+L+NB-IoT W+L+NB-IoT W+G+L+NB-IoT NR+L+NB-IoT	
Baseband 6502 (3 ports)	W, L	-	Micro radios only
Baseband 6648	NR	-	-
DUG 20	G	-	-
DUL 20	L	-	
DUS 31	L, NB-IoT	-	-
DUS 41	L, NB-IoT	-	-
DUW 10 DUW 11 DUW 20 DUW 30 DUW 31 DUW 41	W	-	-
IDU 5205	W, L	-	Radio Dot system only.
IDU 5209	W, L	W+L	Radio Dot system only.
RBS 6302	W, L, NB-IoT	-	See DUW for W. See DUS 41 for L, NB-IoT.
RBS 6501	W, L	-	Single standard (W or L only). Cannot be used in mixed mode configurations. For W:



DU / Baseband	Supported RATs	Mixed Mode Baseband Configurations	Comments
			<ul style="list-style-type: none"> — 2TX/2RX micro radios For L: <ul style="list-style-type: none"> — LTE FDD only — 2TX/2RX non-AAS radios — 4TX/4RX non-AAS radios configured with 2TX/2RX RBB
Streetmacro 6701	NR	-	-

1.5 Radio Bands

Table 4 Radio Bands

3GPP Bands	Sub-Bands ⁽¹⁾	Uplink (MHz)	Downlink (MHz)
$\emptyset^{(1)}$		890 - 915	935 - 960
	0A	890 - 915	935 - 960
	0B	890 - 915	935 - 960
1		1920 - 1980	2110 - 2170
	1A	1920 - 1980	
	1B	1920 - 1975	2110 - 2165
2		1850 - 1910	1930 - 1990
3		1710 - 1785	1805 - 1880
	3A	1735 - 1785	1830 - 1880
	3B	1710 - 1765	1805 - 1860
	3C	1744 - 1784	1839 - 1879
	3D	1744 - 1784	1839 - 1879
	3E	1710 - 1735	1805 - 1830
4		1710 - 1755	2110 - 2155
5		824 - 849	869 - 894
	5A	824 - 843.4	869 - 888.4
	5B	824 - 835	869 - 880
7		2500 - 2570	2620 - 2690
	7A	2500-2560	2620-2680
8		880 - 915	925 - 960
	8A	889 - 915	934 - 960
9		1749.9 - 1784.9	1844.9 - 1879.9
11		1427.9 - 1447.9	1475.9 - 1495.9
12		699 - 716	729 - 746
	12A	699 - 715	729-745
13		777 - 787	746 - 756
14		788 - 798	758 - 768
17		704 - 716	734 - 746



3GPP Bands	Sub-Bands ⁽¹⁾	Uplink (MHz)	Downlink (MHz)
18		815 - 830	860 - 875
20		832 - 862	791 - 821
25		1850 - 1915	1930 - 1995
26		814 - 849	859 - 894
	26A	817 - 824	862 - 869
	26B	814 - 824	859 - 869
	26C	821 - 835	866 - 880
	26D	814 - 835	859 - 880
28		703 - 748	758 - 803
	28A	718 - 748	773 - 803
	28C	713 - 743	768 - 798
	28D	718 - 728	773 - 783
	28E	706 - 736	761 - 791
29		-	716-728
30		2305 - 2315	2350 - 2360
31		452.5 - 457.5	462.5 - 467.5
	32A	-	1452-1492
34		2010 - 2025	2010 - 2025
38		2570 - 2620	2570 - 2620
	38A	2575 - 2615	2575 - 2615
39		1880 - 1920	1880 - 1920
	39A	1885 - 1915	1885 - 1915
40		2300 - 2400	2300 - 2400
	40A	2320 - 2370	2320 - 2370
	40B	2302.5 - 2322.5	2302.5 - 2322.5
	40C	2305 - 2325	2305 - 2325
	40D	2320 - 2340	2320 - 2340
	40N	2300 - 2395	2300 - 2395
	40S	2300 - 2386	2300 - 2386
	40T	2300 - 2395	2300 - 2395
	40U	2300 - 2390	2300 - 2390
	40Y	2350 - 2390	2350 - 2390
41		2496 - 2690	2496 - 2690
	41A	2496 - 2658	2496 - 2658
	41B	2595 - 2645	2595 - 2645
	41C	2535 - 2655	2535 - 2655
	41D	2535 - 2575	2535 - 2575
	41E	2575 - 2635	2575 - 2635
	41F	2635 - 2675	2635 - 2675
	41K	2515 - 2675	2515 - 2675
	41M	2496 - 2690	2496 - 2690
	41N	2545 - 2595	2545 - 2595
42		3400 - 3600	3400 - 3600
	42B ⁽²⁾	2480 - 3520	2480 - 3520



3GPP Bands	Sub-Bands ⁽¹⁾	Uplink (MHz)	Downlink (MHz)
	42B ⁽³⁾	3520 - 3560	3520 - 3560
	42F	3420 - 3600	3420 - 3600
	42G	3410 - 3600	3410 - 3600
43		3600 - 3800	3600 - 3800
	46A	5160 - 5250	5160 - 5250
	46B	5250 - 5340	5250 - 5340
	46C	5480 - 5710	5480 - 5710
	46D	5725 - 5875	5725 - 5875
48		3550 - 3700	3550 - 3700
66 ⁽⁴⁾		1710 - 1780	2110 - 2200
	66A ⁽⁵⁾	1710 - 1780	2110 - 2180
70		1695 - 1710	1995 - 2020
71		663 - 698	617 - 652
	77A	3900 - 4000	3900 - 4000
	77B	3800 - 4000	3800 - 4000
	78A	3300 - 3600	3300 - 3600
	78B	3500 - 3600	3500 - 3600
	78C	3500 - 3700	3500 - 3700
	78F	3420 - 3600	3420 - 3600
	78G	3600 - 3800	3600 - 3800
	78H	3542 - 3700	3542 - 3700
	78K	3420 - 3800	3420 - 3800
	78L	3500 - 3800	3500 - 3800
	78Q	3300 - 3500	3300 - 3500
	85A	698 - 715	728 - 745
111 ⁽¹⁾		1915 - 1920	716-728
222 ⁽¹⁾		1915 - 1920	1995 - 2020
257		26500 - 29500	26500 - 29500
	257A	27500 - 28350	27500 - 28350
258B		26500 - 27500	26500 - 27500
260		37000 - 40000	37000 - 40000
261		27500 - 28350	27500 - 28350
PPDR1		788-791	733-736

- (1) Not defined by 3GPP.
(2) For Radio 2218 with KRC 161 616/1.
(3) For Radio 2218 with KRC 161 647/1.
(4) Upper 45 MHz of band 66 is for LTE only.
(5) Upper 25 MHz of band 66A is for LTE only.



1.6 IBW for RUS 01 and RRUS 01 Depending on GSM Modulation Technique

Table 5 IBW for RUS 01 and RRUS 01 Depending on GSM Modulation Technique

GSM Modulation Technique	IBW (MHz) at 60 W ⁽¹⁾
GMSK	20
8PSK	20 or 18 ⁽²⁾
16 QAM and 32 QAM	15

(1) Radios for frequency bands smaller than IBW support the full frequency band.

(2) 18 MHz IBW only applies to configurations in frequency band 3 with two carriers, each with more than 15 W output power. 20 MHz IBW applies to all other configurations.

1.7 Non-Frequency Specific Radio Data

Table 6 Non-Frequency Specific Radio Data

Radio	Number of Antenna Branches or Beams ⁽¹⁾		Number of Data Ports ⁽²⁾	Cascading Support	Different Line Rates on Different Ports	Supported Line Rates (Gbps)					
	TX	RX				CPRI					eCPRI
						1.2	2.5	4.9	9.8	10.1	
AIR 11	2	2	2	-	-	-	X	-	-	-	-
AIR 1281	8	8	4	-	-	-	-	-	-	X	-
AIR 1641	16	16	4	-	-	-	X	X	X	X	-
AIR 21	2	4	2	X	-	-	X	-	-	-	-
AIR 2488	2	4	2	X	X	-	X	X	X	X	-
AIR 2488 MB	2 ⁽³⁾	4 ⁽³⁾	2 ⁽³⁾	X	X	-	X	X	X	X	-
AIR 32	4	4	2	X	X	-	X	X	X	-	-
AIR 32 MB	4 ⁽³⁾	4 ⁽³⁾	2 ⁽³⁾	X	X	-	X	X	X	-	-
AIR 3227	n/a	n/a	2	-	-	-	-	-	-	-	X
AIR 3236	n/a	n/a	2	-	-	-	-	-	-	-	X
AIR 3239	n/a	n/a	3	-	-	-	-	-	-	-	X
AIR 3246	4 ⁽⁴⁾	4 ⁽⁴⁾	4 ⁽⁵⁾	-	-	-	X	-	X	X ⁽⁶⁾	-
AIR 4455 ⁽¹⁵⁾	4	4	2	X	X	-	X	X	X	X	-
AIR 5121	4	4	2	-	-	-	-	-	-	X	-
AIR 5331	8	8	4	-	-	-	-	-	-	X	-
AIR 6449	n/a	n/a	4	-	-	-	-	-	-	-	X
AIR 6454	n/a	n/a	5	-	-	-	-	-	-	-	X
AIR 6468	n/a	n/a	2	-	-	-	-	-	-	-	X



Radio	Number of Antenna Branches or Beams ⁽¹⁾		Number of Data Ports ⁽²⁾	Cascading Support	Different Line Rates on Different Ports	Supported Line Rates (Gbps)					
						CPRI					eCPRI
	TX	RX				1.2	2.5	4.9	9.8	10.1	10.3
AIR 6488	n/a	n/a	3	-	-	-	-	-	-	-	X
Dot 2272 or Dot 2282 + IRU 8844 or IRU 8884	2 ⁽³⁾	2 ⁽³⁾	2	X	X	-	X	X	X	X	-
Dot 4479 or Dot 4489 + IRU 8846	4	4	2	X	X	-	X	X	X	X	-
mRRUS 12	2	2	2	X	X	-	X	X	-	-	-
mRRUS 61	2	2	2	-	-	-	X	-	-	-	-
Radio 0208	-	2	2	X	X	-	X	X	X	-	-
Radio 2012	2	-	2	X	X	-	X	X	X	X	-
Radio 2203	2	2	2	X	X	-	X	X	X	-	-
Radio 2205	2	2	2 ⁽⁷⁾	X	-	-	X	X	X	-	-
Radio 2208	2	2	2 ⁽⁷⁾	X	-	-	X	X	X	-	-
Radio 2212	2	2	2	X	X	-	X	X	X	X	-
Radio 2217	2	2	2	X	X	-	X	X	X	-	-
Radio 2218	2	2	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
Radio 2219	2	2	2	X	X	-	X	X	X	-	-
Radio 2228	2	2	2	X	X	-	X	X	X	X	-
Radio 2237	2	2	2	X	X	-	X	X	X	-	-
Radio 2238	2	2	2	X	X	-	X	X	X	X	-
Radio 2242 ⁽¹³⁾	2	2	2	X	X	-	X	X	X	X	-
Radio 2260 ⁽¹³⁾	2	2	2	X	X	-	X	X	X	X	-
Radio 2279 ⁽¹³⁾	2	2	2	X	X	-	X	X	X	X	-
Radio 2460 ⁽¹⁵⁾	2	4	2	X	X	-	X	X	X	X	-
Radio 2468	2	4	2	X	X	-	X	X	X	X	-
Radio 2479	2	4	2	X	X	-	X	X	X	X	-
Radio 4402	4	4	2	X	X	-	X	X	X	X	-
Radio 4407	4	4	2	X	-	-	X	X	X	-	-
Radio 4408	4	4	2	X	X	-	X	X	X	X	-
Radio 4412	4	4	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
Radio 4415	4	4	2	X	X	-	X	X	X	X	-
Radio 4417	4	4	2	X	X	-	X	X	X	X	-
Radio 4418	4	4	2	X	X	-	X	X	X	X	-
Radio 4422	4	4	2	X	X	-	X	X	X	X	-
Radio 4426	4	4	2	X	X	-	X	X	X	X	-
Radio 4428	4	4	2	X	X	-	X	X	X	X	-
Radio 4429	4	4	2	X	X	-	X	X	X	X	-
Radio 4442 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-
Radio 4443 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-
Radio 4449 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-
Radio 4455 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-



Radio	Number of Antenna Branches or Beams ⁽¹⁾		Number of Data Ports ⁽²⁾	Cascading Support	Different Line Rates on Different Ports	Supported Line Rates (Gbps)					
	TX	RX				CPRI					eCPRI
						1.2	2.5	4.9	9.8	10.1	
Radio 4478	4	4	2	X	X	-	X	X	X	X	-
Radio 4480 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-
Radio 4499 ⁽¹³⁾	4	4	2	X	X	-	X	X	X	X	-
Radio 8808	8	8	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
Radio 8818	8	8	2 ⁽⁸⁾	X	-	-	X	X	X	X	-
Radio 8823	8	8	2 ⁽⁸⁾	-	-	-	-	-	X	X	-
Radio 8836	8	8	2 ⁽⁸⁾	-	-	-	-	-	X	X	-
Radio 8842 ⁽¹³⁾	8	8	2 ⁽⁸⁾	-	-	-	X	X	X	X	-
Radio 8843 ⁽¹³⁾	8 ⁽⁹⁾	8 ⁽⁹⁾	2	X	X	-	X	X	X	X	-
Radio 8863	8	8	2 ⁽⁸⁾	-	-	-	-	-	-	X	-
RBS 6501 radio part	2	2	2 ⁽¹⁰⁾	-	-	-	X	-	-	-	-
RD 2242 + IRU 2242	2	2	2	X	X	-	X	X	X ⁽¹¹⁾	-	-
RD 2243 + IRU 2242	2	2	2	X	X	-	X	X	X ⁽¹¹⁾	-	-
RD 2253 + IRU 2242	2	2	2	X	X	-	X	X	X ⁽¹¹⁾	-	-
RD 4442 + IRU 2242	2 ⁽³⁾	2 ⁽³⁾	2 ⁽³⁾	X	X	-	X	X	X ⁽¹¹⁾	-	-
RD 4453 + IRU 2242	2 ⁽³⁾	2 ⁽³⁾	2 ⁽³⁾	X	X	-	X	X	X ⁽¹¹⁾	-	-
RRU 22	1	2	1	-	-	X	-	-	-	-	-
RRU 2208	2	2	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
RRU 2216	2	2	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
RRU 22F1	2	2	2 ⁽¹²⁾	X	X	-	X	X	-	-	-
RRU 22F2 ⁽¹³⁾	2 ⁽³⁾	2	2 ⁽¹⁴⁾	-	-	-	X	X	-	-	-
RRU 22F3 ⁽¹⁵⁾	2 ⁽³⁾	2	2 ⁽¹⁴⁾	-	X	-	X	-	X	-	-
RRUL 11	2	2	1	-	-	-	X	-	-	-	-
RRUL 62	2	2	2 ⁽⁸⁾	X	-	-	X	X	X	-	-
RRUL 63	2	2	2	X	X	-	X	X	X	-	-
RRUL 81	8	8	2	-	-	-	-	-	X	-	-
RRUL 82	8	8	2 ⁽⁸⁾	-	-	-	X	-	X	-	-
RRUS 01	1	2	2	X	X	X	X	-	-	-	-
RRUS 02	1	2	2	X	X	X	X	-	-	-	-
RRUS 11	2	2	2	X	X	X	X	-	-	-	-
RRUS 12	2	2	2	X	X ⁽¹⁶⁾	X	X	-	-	-	-
RRUS 13	2	2	2	X	X	X	X	X	X	-	-
RRUS 14	2	2	2	X	X	-	X	X	X	-	-
RRUS 14s	2	2	2	X	X	-	X	X	X	-	-
RRUS 31	4	4	2	-	-	-	X	X	-	-	-
RRUS 32	4	4	2	X	X	-	X	X	X	-	-
RRUS 61	2	2	2	-	-	-	X	-	-	-	-



Radio	Number of Antenna Branches or Beams ⁽¹⁾		Number of Data Ports ⁽²⁾	Cascading Support	Different Line Rates on Different Ports	Supported Line Rates (Gbps)					
	TX	RX				CPRI					eCPRI
						1.2	2.5	4.9	9.8	10.1	10.3
RRUS 62	2	2	2	X	X	-	X	X	X	-	-
RRUS 72	4	4	2	X	X	-	X	X	X	-	-
RRUS 82	8	8	2 ⁽⁸⁾	-	-	-	X	-	X	-	-
RRUS A2	-	2	2	X	-	-	X	-	-	-	-
RRUS A3	-	2	2	X	X	-	X	X	X	-	-
RRUS E2	2	-	2	X	-	-	X	-	-	-	-
RRUW 01	1	2	2	X	X	X	X	-	-	-	-
RRUW 02	1	2	2	X	X	X	X	-	-	-	-
RRUW 03	1	2	2	X	X	X	X	-	-	-	-
RUL 01	1	2	2	X	-	-	X	-	-	-	-
RUS 01	1	2	2	X	-	-	X	-	-	-	-
RUS 02	1	2	2	X	-	-	X	-	-	-	-
RUS 03	1	2	2	X	X	-	X	X	X	-	-
RUW 01	1	2	2	X	-	-	X	-	-	-	-
RUW 02	1	2	2	X	-	-	X	-	-	-	-
Streetmacro 6701	8	8	4 ⁽¹⁰⁾	-	-	-	-	-	-	X	-
Vault Radio System 2268	2	2	2	X	X	-	X	X	X	-	-

(1) Beams for AAS.

(2) Radios with two data ports normally support cascading.

(3) For each band.

(4) Use 32TX and 32RX when calculating CPRI capacity.

(5) 2 data ports, up to SW 18.Q4.

4 data ports, from SW 19.Q1.

(6) Support CPRI 10.1 Gbps from L19.Q1 on Band 2, Band 25 and Band 66.

(7) Two CPRI ports towards DU or Baseband can operate at different line rates. When cascading, both ports must operate at the same line rate.

(8) CPRI line rate must be the same on both data ports.

(9) Four branches per band.

(10) Data ports are internally connected.

(11) 9.8 Gbps CPRI is supported by IRU 2242, KRC 161 444/3.

(12) Data 1 only as primary.

(13) Dual band radio.

(14) Data port is used for all bands.

(15) Triple band radio.

(16) RRUS 12 B7 does not support different line rates on different ports.

1.8 Virtual IBW

Virtual IBW can extend the IBW of a radio beyond the IBW of each individual RF port. [Supported Radio Frequencies](#) on page 2 provides IBW per RF port for each radio and which radios that support Virtual IBW.



See [Figure 3](#) for an example of Virtual IBW maximizing carrier bandwidth with WCDMA, GSM, and 4-way diversity for LTE.

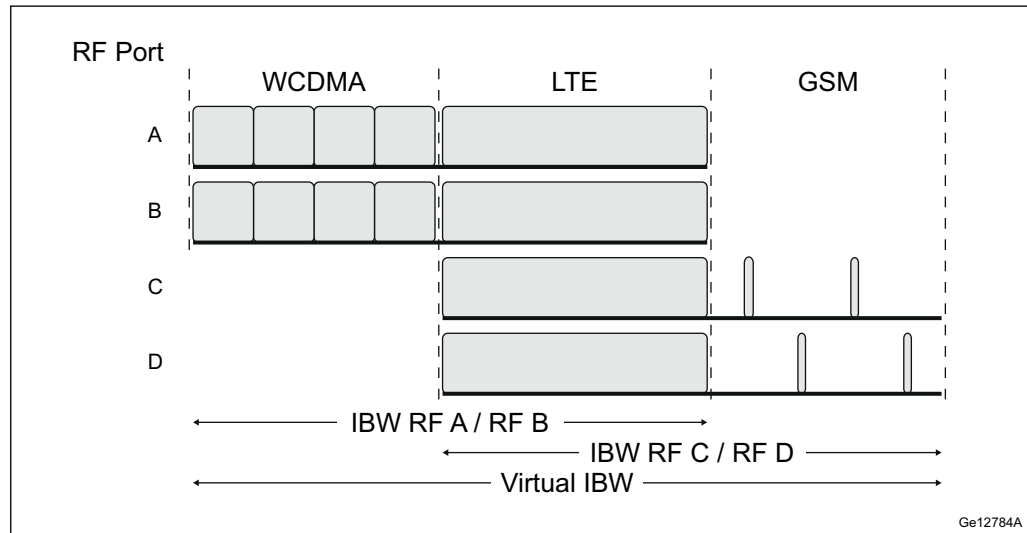


Figure 3 Virtual IBW Example

1.9 Radio Dot System

In the Radio Dot System (RDS), one radio is divided into an Indoor Radio Unit (IRU) and up to eight Radio Dots (RDs) or Dots. Refer to the document [Radio Dot System Description](#) for more information.

The following rules apply to RDS configurations:

- IRU 2242 can be installed in RBS 6202, RBS 6601, or Remote IRU Enclosure, and connected to DUs or Baseband units in all RBS 6000 RBSs.
- In configurations with DUW, the following DUW variants are supported: DUW 11, DUW 31, and DUW 41.
- The carriers from the IRU are transferred to all connected RDs or Dots.
- RD 2242, RD 2243, and RD 2253 supports one band.
- RD 4442 and RD 4453 both have two parts. Each part supports one band.
- RD 2253, RD 4453, Dot 2282 and Dot 4489 support external antennas only.
- Dot 2272 and Dot 2282 can only be connected with IRU 8844 (eight Dot interface) or IRU 8884 (16 Dot interface) on the same band(s), as shown in [Table 8](#).
- Dot 4479 and Dot 4489 can only be connected with IRU 8846.



Table 7 lists supported combinations of RDs using one IRU 2242.

Table 7 RD Compatibility Using One IRU 2242

Standard	RD ⁽¹⁾	LTE FDD				LTE TDD			
		RD 2242	RD 2243	RD 4442 ⁽²⁾	RD 4453 ⁽²⁾	RD 2242	RD 2243	RD 2253	RD 4442 ⁽²⁾
LTE FDD	RD 2242	X	-	-	-	-	-	-	-
	RD 2243	-	X	X	X	-	-	-	-
	RD 4442 ⁽²⁾	-	X	X	X	-	-	-	-
	RD 4453 ⁽²⁾	-	X	X	X	-	-	-	-
LTE TDD	RD 2242	-	-	-	-	X	-	-	-
	RD 2243	-	-	-	-	-	X	X	X
	RD 2253	-	-	-	-	-	X	X	X
	RD 4442 ⁽²⁾	-	-	-	-	-	X	X	X

(1) RDs sharing one IRU must support the same band.

(2) RD 4442 and RD 4453 both have two parts. The two parts cannot be connected to the same IRU.

Table 8 Dot and IRU Compatibility

IRU	Supported Standards			
	Dot 2272	Dot 2282	Dot 4479	Dot 4489
IRU 8844	W, L	W, L	-	-
IRU 8846	-	-	NR	NR
IRU 8884	W, L	W, L	-	-

Dual band Dot products support different RBBs for respective band defined by the product name, as shown in Table 9.

The dual band Dot is named as follows:

Dot XXXX [Band A][Band B] For example *Dot 2272 B1B3*.

Table 9 RBB Support for Dual Band Dots

Dot Product	RBBs for Band A	RBBs for Band B
Dot 2272 Dot 2282	RBB22_1F	RBB22_1G
	RBB22_2K	RBB22_2L
	RBB44_1N	RBB44_1P
	RBB44_2S	RBB44_2T



1.10 Radio Groups

Every LTE capable radio belongs to a radio group. A radio group is defined by how efficiently data can be sent over CPRI and eCPRI interfaces and processed by DU and Baseband. This definition is based on the following:

- Sample rate capability
- CPRI Compression support
- Radio group compatibility
- Data interface type
- Total antenna bandwidth for a DU or Baseband

Radio groups are organized according to sample rate capabilities in three categories: S1, S2, and S3.

Radio groups are organized according to CPRI Compression support in two categories: C1 and C2.

Table 10 Radio Groups and Radio Capabilities

Radio Group	Type	Radios	Sample Rate Capabilities	CPRI Compression Support	Compatible Radio Groups ⁽¹⁾	Data Interface
1	-	AIR 11 AIR 21 mRRUS 61 RRUS 01 RRUS 11 RRUS 61 RRUW 02 RUL 01 RUS 01 RUW 02	S1	-	3 6	CPRI
2	-	RRUL 11 RRU 22F2 RRUS 31	S1	-	-	CPRI



Radio Group	Type	Radios	Sample Rate Capabilities	CPRI Compression Support	Compatible Radio Groups ⁽¹⁾	Data Interface
3	a	AIR 32 AIR 32 MB RBS 6501 radio part RD 2242 + IRU 2242 RD 2243 + IRU 2242 RD 2253 + IRU 2242 RD 4442 + IRU 2242 RD 4453 + IRU 2242 mRRUS 12 RRUS 02 RRUS 12 RRUS 13 RRUS 14 RRUS 14s RRUS 32 RRUS A2 RRUS A3 RRUS E2 RUS 02 RUS 03	S2	-	1 6	CPRI
	b	Radio 0208 Radio 2203 Radio 2217 Radio 2219 Radio 2237 Vault Radio System 2268	S2	C1	1 6	CPRI
	c	-	S2	C2	-	CPRI
4	-	RRU 22F1 RRU 22F3 RRUL 63 RRUS 62 RRUS 72	S2	-	-	CPRI
5	a	Radio 2205 ⁽²⁾ Radio 2218 Radio 4407 ⁽²⁾ Radio 4412 ⁽²⁾ Radio 8808 (B38A, B39A, and B41E) Radio 8818 RRU 2208 RRU 2216 RRUL 62 RRUL 82 RRUS 82	S3	-	-	CPRI
	b	Radio 4407 ⁽³⁾ Radio 4412 ⁽³⁾ Radio 8808 (B40Y) RRUL 81	S3	C1	-	CPRI
	c	Radio 2205 ⁽⁴⁾ Radio 2208 Radio 8823 Radio 8836 Radio 8842	S3	C2	-	CPRI



Radio Group	Type	Radios	Sample Rate Capabilities	CPRI Compression Support	Compatible Radio Groups ⁽¹⁾	Data Interface
6	-	AIR 1641 AIR 2488 AIR 2488 MB AIR 3246 AIR 4455 Dot 2272 + IRU 8844 or IRU 8884 Dot 2282 + IRU 8844 or IRU 8884 Dot 4479 + IRU 8846 Dot 4489 + IRU 8846 Radio 2012 Radio 2212 Radio 2228 Radio 2238 Radio 2242 Radio 2260 Radio 2279 Radio 2460 Radio 2479 Radio 2468 Radio 4402 Radio 4408 Radio 4415 Radio 4417 Radio 4418 Radio 4422 Radio 4426 Radio 4428 Radio 4442 Radio 4443 Radio 4449 Radio 4455 Radio 4478 Radio 4480 Radio 4499 Radio 8843 Radio 8863	S3	C2	1 3	CPRI
7	-	AIR 1281 AIR 5121 AIR 5331	S3	C2	-	CPRI
8	-	AIR 3227 AIR 3236 AIR 3239 AIR 6449 AIR 6454 AIR 6468 AIR 6488	-	-	-	eCPRI

(1) Combinations with radios from these groups are supported in the same RBB.

(2) Up to SW L18.Q3 radio belongs to group 5a.

(3) From SW L18.Q3 radio belongs to group 5b.

(4) From SW L18.Q4 radio belongs to group 5c.