

Confidentiality Class	External Confidentiality Label	Document Type	Sheet
Ericsson Internal			1 (6)
Prepared By (Subject Responsible)	Approved By (Document Responsible)	Checked	
EHUAYAN	Hua Yang		
Document Number	Revision	Date	Reference
TA8AKRC161711-1	C	2019-09-17	



Federal Communications Commission
Authorization & Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046
Attention: Equipment Authorization Branch

Subject: Permissive Change Request for FCC ID: TA8AKRC 161 711-1

To Whom It May Concern:

Ericsson AB requests to authorize additional antennas for Part 96 operations with the FCC Hardware Certified Part 96 CBSD radio device.

Radio Vendor: Ericsson AB
Radio Product Name: Radio 2208 B48
Radio Model Number: KRC 161 711/1
Radio FCC ID: TA8AKRC161711-1

Radio dynamic range:

- Maximum linear conducted power rating at output connector into 50 ohms that meets all OOB requirements [zero additional attenuation, highest power setting allowed, for use with lowest gain external antennas] (dBm): 40dBm per port or 43 dBm total power
- Minimum linear conducted power rating at output connector into 50 ohms that meets all OOB requirements [maximum additional linear attenuation, lowest power setting allowed, for use with highest gain external antennas] (dBm): 10dBm per port or 13 dBm total power
- Note: use of an external cable introduces additional losses that may be compensated appropriately by increasing the radio's power level (reducing the attenuator setting). This cable compensation may be achieved during radio setup.

The Original Equipment Manufacturer (OEM) vendor of the radio states that the use of the following listed external antennas meets all requirements for Part 96 operations. The following specific external antennas may be used in conjunction with this model radio at the appropriate listed power settings.

These antennas will allow this radio to meet the appropriate Part 96 requirements for Maximum EIRP, at below:

- 30 dBm EIRP (for Category A operations), or
- 47 dBm/10MHz EIRP (for Category B operations).

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Total conducted power is shown, for each antenna, with varying signal operating bandwidths.

CBRS Band 48 External antennas authorized by the Original Equipment Manufacturer for use with this radio

Antenna Configuration	Antenna Vendor	Antenna Model Number	Antenna Main Beam Peak Gain [dBi]	LTE Carrier Bandwidth [MHz]	Carrier Numbers	Signal Bandwidth [MHz]	Maximum Conducted Total Power [dBm]	EIRP [dBm/10MHz]	EIRP per Bandwidth [dBm]	Operational Category [A / B]
1	JMA	CX14OMI236-1C	5	10	1	10	42.0	47.0	47.0	B
				20	1	20	43.0	45.0	48.0	
				20	2	40	43.0	42.0	45.0	
				20	3	60	43.0	40.2	43.2	
2	JMA	CX16OMI236-1C	5	10	1	10	42.0	47.0	47.0	B
				20	1	20	43.0	45.0	48.0	
				20	2	40	43.0	42.0	45.0	
				20	3	60	43.0	40.2	43.2	
3	JMA	CX16OMI224-1H	6.1	10	1	10	40.9	47.0	47.0	B
				20	1	20	43.0	46.1	49.1	
				20	2	40	43.0	43.1	46.1	
				20	3	60	43.0	41.3	44.3	
4	JMA	CX16OMI218-1P	5.3	10	1	10	41.7	47.0	47.0	B
				20	1	20	43.0	45.3	48.3	
				20	2	40	43.0	42.3	45.3	
				20	3	60	43.0	40.5	43.5	

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5	JMA	DX10FRO260-00 or 06	15.5	10	1	10	31.5	47.0	47.0	B
				20	1	20	34.5	47.0	50.0	
				20	2	40	37.5	47.0	50.0	
				20	3	60	39.3	47.0	50.0	
6	JMA	DX12FRO260-20 or 26	14.8	10	1	10	32.2	47.0	47.0	B
				20	1	20	35.2	47.0	50.0	
				20	2	40	38.2	47.0	50.0	
				20	3	60	40.0	47.0	50.0	
7	Amphenol	C2U3MT360X06Fxs0	8.1	10	1	10	38.9	47.0	47.0	B
				20	1	20	41.9	47.0	50.0	
				20	2	40	43.0	45.1	48.1	
				20	3	60	43.0	43.3	46.3	
8	Amphenol	2C2U3MT360X06Fxs0	5.8	10	1	10	41.2	47.0	47.0	B
				20	1	20	43.0	45.8	48.8	
				20	2	40	43.0	42.8	45.8	
				20	3	60	43.0	41.0	44.0	
9	Amphenol	4U4MT360X06Fxs0	5.7	10	1	10	41.3	47.0	47.0	B
				20	1	20	43.0	45.7	48.7	
				20	2	40	43.0	42.7	45.7	
				20	3	60	43.0	40.9	43.9	
10	Amphenol	2C4U3MT360X06Fwxys0	5.9	10	1	10	41.3	47.0	47.0	B
				20	1	20	43.0	45.7	48.7	
				20	2	40	43.0	42.7	45.7	
				20	3	60	43.0	40.9	43.9	

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11	Amphenol	2U3MX065X06Fxs0	11.6	10	1	10	35.4	47.0	47.0	B
				20	1	20	38.4	47.0	50.0	
				20	2	40	41.4	47.0	50.0	
				20	3	60	43.0	46.8	49.8	
12	Amphenol	4U4MX065X06Fxs0	11.3	10	1	10	35.7	47.0	47.0	B
				20	1	20	38.7	47.0	50.0	
				20	2	40	41.7	47.0	50.0	
				20	3	60	43.0	46.5	49.5	
13	Amphenol	2C4U3MX065X06Fwxys0	8.9	10	1	10	38.1	47.0	47.0	B
				20	1	20	41.1	47.0	50.0	
				20	2	40	43.0	45.9	48.9	
				20	3	60	43.0	44.1	47.1	
14	Kathrein	84010555 / 84010556	7	10	1	10	40.0	47.0	47.0	B
				20	1	20	43.0	47.0	50.0	
				20	2	40	43.0	44.0	47.0	
				20	3	60	43.0	42.2	45.2	
15	Kathrein	84010557 / 84010558	6.3	10	1	10	40.7	47.0	47.0	B
				20	1	20	43.0	46.3	49.3	
				20	2	40	43.0	43.3	46.3	
				20	3	60	43.0	41.5	44.5	
16	Kathrein	84010603 / 84010604	6.5	10	1	10	40.5	47.0	47.0	B
				20	1	20	43.0	46.5	49.5	
				20	2	40	43.0	43.5	46.5	
				20	3	60	43.0	41.7	44.7	

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17	Kathrein	84010564	11.5	10	1	10	35.5	47.0	47.0	B
				20	1	20	38.5	47.0	50.0	
				20	2	40	41.5	47.0	50.0	
				20	3	60	43.0	46.7	49.7	
18	CommScope	VVSSP-360S-F	4.9	10	1	10	42.1	47.0	47.0	B
				20	1	20	43.0	44.9	47.9	
				20	2	40	43.0	41.9	44.9	
				20	3	60	43.0	40.1	43.1	
19	CommScope	NNVVSSP-360S-FM	5.7	10	1	10	41.3	47.0	47.0	B
				20	1	20	43.0	45.7	48.7	
				20	2	40	43.0	42.7	45.7	
				20	3	60	43.0	40.9	43.9	
20	CommScope	V4SSPP-360S-F	5.4	10	1	10	41.6	47.0	47.0	B
				20	1	20	43.0	45.4	48.4	
				20	2	40	43.0	42.4	45.4	
				20	3	60	43.0	40.6	43.6	
21	CommScope	VVSSP-65S-R1B (Canister)	9.8	10	1	10	37.2	47.0	47.0	B
				20	1	20	40.2	47.0	50.0	
				20	2	40	43.0	46.8	49.8	
				20	3	60	43.0	45.0	48.0	
22	CommScope	VVSSP-65S-R1BV2 (Panel)	10.4	10	1	10	36.6	47.0	47.0	B
				20	1	20	39.6	47.0	50.0	
				20	2	40	42.6	47.0	50.0	
				20	3	60	43.0	45.6	48.6	

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23	MobileMark	EDN32-3700	5	10	1	10	42.0	47.0	47.0	B
				20	1	20	43.0	45.0	48.0	
				20	2	40	43.0	42.0	45.0	
				20	3	60	43.0	40.2	43.2	
24	Rosenberger	CA- AEOIOITJTJVEX360F- JS06	9	10	1	10	38.0	47.0	47.0	B
				20	1	20	41.0	47.0	50.0	
				20	2	40	43.0	46.0	49.0	
				20	3	60	43.0	44.2	47.2	
25	CommScope	SSPX31ORV2	18.1	10	1	10	28.9	47.0	47.0	B
				20	1	20	31.9	47.0	50.0	
				20	2	40	34.9	47.0	50.0	
				20	3	60	36.7	45.6	50.0	