

**§ 95.633 Emission bandwidth.**

(a) The *authorized bandwidth* (maximum permissible bandwidth of a transmission) for emission type H1D, J1D, R1D, H3E, J3E or R3E is 4 kHz. The authorized bandwidth for emission type A1D or A3E is 8 kHz. The authorized bandwidth for emission type F1D, G1D, F3E or G3E is 20 kHz.

(b) The authorized bandwidth for any emission type transmitted by an R/C transmitter is 8 kHz.

(c) The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.5 kHz.

(d) For transmitters in the LPRS:

(1) The authorized bandwidth for narrowband frequencies is 4 kHz and the channel bandwidth is 5 kHz

(2) The channel bandwidth for standard band frequencies is 25 kHz.

(3) The channel bandwidth for extra band frequencies is 50 kHz.

(4) AMTS stations may use the 216.750–217.000 MHz band as a single 250 kHz channel so long as the signal is attenuated as specified in § 95.635(c).

(e) For transmitters in the MICS:

(1) The maximum authorized emission bandwidth is 300 kHz.

(2) Lesser authorized emission bandwidths may be employed, provided that the unwanted emissions are attenuated as provided in § 95.635 and that the power radiated in any 300 kHz bandwidth does not exceed 25 microwatts EIRP. See §§ 95.605 and 95.639(g) regarding power measurement procedures.

(3) Emission bandwidth will be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency,

that are 20 dB down relative to the maximum level of the modulated carrier. Compliance with the emission bandwidth limit is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(f) The authorized bandwidth for any emission type transmitted by a MURS transmitter is specified as follows:

(1) Emissions on frequencies 151.820 MHz, 151.880 MHz, and 151.940 MHz are limited to 11.25 kHz.

(2) Emissions on frequencies 154.570 and 154.600 MHz are limited to 20.0 kHz.

(3) Provided, however, that all A3E emissions are limited to 8 kHz.

(g) DSRCS-OBUs are governed under subpart L of this part.

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**§ 95.635 Unwanted radiation.**

(a) In addition to the procedures in part 2, the following requirements apply to each transmitter both with and without the connection of all attachments acceptable for use with the transmitter, such as an external speaker, microphone, power cord, antenna, etc.

(b) The power of each unwanted emission shall be less than TP as specified in the applicable paragraphs listed in the following table:

Transmitter	Emission type	Applicable paragraphs (b)
GMRS .....	A1D, A3E, F1D, G1D, F3E, G3E with filtering .....	(1), (3), (7).
	A1D, A3E, F1D, G1D, F3E, G3E without filtering .....	(5), (6), (7).
	H1D, J1D, R1D, H3E, J3E, R3E .....	(2), (4), (7).
FRS .....	F3E with filtering .....	(1), (3), (7).
R/C:		
27 MHz .....	As specified in § 95.631(b) .....	(1), (3), (7).
72–76 MHz .....	As specified in § 95.631(b) .....	(1), (3), (7), (10), (11), (12).
CB .....	A1D, A3E .....	(1), (3), (8), (9).
	H1D, J1D, R1D, H3E, J3E, R3E .....	(2), (4), (8), (9).
	A1D, A3E type accepted before September 10, 1976 .....	(1), (3), (7).
	H1D, J1D, R1D, H3E, J3E, R3E type accepted before September 10, 1986.	(2), (4), (7).
	LPRS .....	As specified in paragraph (c) .....
MICS .....	As specified in paragraph (d) .....	
DSRCS-OBUs .....	As specified in paragraph (f) of this section.	

NOTE 1—Filtering noted for GMRS and FRS transmitters refers to the requirement in § 95.637(b).