

## Federal Communications Commission

## § 30.402

to existing and future international agreements with Canada and Mexico.

### § 30.207 Radio frequency (RF) safety.

Licenses and manufacturers are subject to the radio frequency radiation exposure requirements specified in §§ 1.1307(b), 1.1310, 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

### § 30.208 Operability.

Mobile and transportable stations that operate on any portion of frequencies within the 27.5–28.35 GHz or the 37–40 GHz bands must be capable of operating on all frequencies within those particular bands. Mobile and transportable stations that operate on any portion of either the 24.25–24.45 GHz or 24.75–25.25 GHz bands must be capable of operating on all frequencies within both of those bands.

[83 FR 34492, July 20, 2018]

### § 30.209 Duplexing.

Stations authorized under this rule part may employ frequency division duplexing, time division duplexing, or any other duplexing scheme, provided that they comply with the other technical and operational requirements specified in this part.

## Subpart D—Competitive Bidding Procedures

### § 30.301 Upper Microwave Flexible Use Service subject to competitive bidding.

Mutually exclusive initial applications for Upper Microwave Flexible User Service licenses are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

### § 30.302 Designated entities and bidding credits.

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, have average gross revenues that are not more than \$55 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding three (3) years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use a bidding credit of 15 percent, as specified in § 1.2110(f)(2)(i)(C) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use a bidding credit of 25 percent, as specified in § 1.2110(f)(2)(i)(B) of this chapter.

(c) A rural service provider, as defined in § 1.2110(f)(4) of this chapter, who has not claimed a small business bidding credit may use a bidding credit of 15 percent bidding credit, as specified in § 1.2110(f)(4)(i) of this chapter.

## Subpart E—Special Provisions for Fixed Point-to-Point, Fixed Point-to-Multipoint Hub Stations, and Fixed Point-to-Multipoint User Stations

### § 30.401 Permissible service.

Stations authorized under this subpart may deploy stations used solely as fixed point-to-point stations, fixed point-to-multipoint hub stations, or fixed point-to-multipoint user stations, as defined in § 30.2, subject to the technical and operational requirements specified in this subpart.

### § 30.402 Frequency tolerance.

The carrier frequency of each transmitter authorized under this subpart must be maintained within the following percentage of the reference frequency (unless otherwise specified in

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the instrument of station authorization the reference frequency will be deemed to be the assigned frequency):

Frequency (MHz)	Frequency tolerance (percent)
27,500 to 28,350 .....	0.001
38,600 to 40,000 .....	0.03

**§ 30.403 Bandwidth.**

(a) Stations under this subpart will be authorized any type of emission, method of modulation, and transmission characteristic, consistent with efficient use of the spectrum and good engineering practice.

(b) The maximum bandwidth authorized per frequency to stations under this subpart is set out in the table that follows.

Frequency band (MHz)	Maximum authorized bandwidth
27,500 to 28,350 .....	850 MHz.
38,600 to 40,000 .....	200 MHz. <sup>1</sup>

<sup>1</sup>For channel block assignments in the 38,600–40,000 MHz bands when adjacent channels are aggregated, equipment is permitted to operate over the full channel block aggregation without restriction.

**§ 30.404 Emission limits.**

(a) The mean power of emissions must be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) When using transmissions other than those employing digital modulation techniques:

(i) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 decibels;

(ii) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 decibels;

(iii) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least  $43 + 10 \text{Log}_{10}$  (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(2) When using transmissions employing digital modulation techniques in situations not covered in this section:

(i) In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 250 percent of the authorized bandwidth: As specified by the following equation but in no event less than 11 decibels:

$$A = 11 + 0.4(P - 50) + 10 \text{Log}_{10} B.$$

(Attenuation greater than 56 decibels or to an absolute power of less than -13 dBm/1MHz is not required.)

(ii) In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least  $43 + 10 \text{Log}_{10}$  (the mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation. The authorized bandwidth includes the nominal radio frequency bandwidth of an individual transmitter/modulator in block-assigned bands. Equipment licensed prior to April 1, 2005 shall only be required to meet this standard in any 4 kHz band.

(iii) The emission mask in paragraph (a)(2)(i) of this section applies only to the band edge of each block of spectrum, but not to subchannels established by licensees. The value of P in the equation is the percentage removed from the carrier frequency and assumes that the carrier frequency is the center of the actual bandwidth used. The emission mask can be satisfied by locating a carrier of the subchannel sufficiently far from the channel edges so that the emission levels of the mask are satisfied. The emission mask shall use a value B (bandwidth) of 40 MHz, for all cases even in the case where a narrower subchannel is used (for instance the actual bandwidth is 10 MHz) and the mean output power used in the calculation is the sum of the output power of a fully populated channel. For block assigned channels, the out-of-band emission limits apply only outside the assigned band of operation and not within the band.

(b) [Reserved]

**§ 30.405 Transmitter power limitations.**

On any authorized frequency, the average power delivered to an antenna in this service must be the minimum amount of power necessary to carry