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FCC REGULATIONS

The FCC updated its RF safety regulations in 1997. The regulations require that all transmitting sites in the United States must meet all aspects of these regulations as of September 1, 2000.

The FCC Regulations are based on setting limits for human exposure. The FCC limits are similar to, but not identical, to the limits of several other major standards. There are two sets of exposure limits.

- **Occupational/Controlled**
- **General Population/Uncontrolled**

[History](#)

[Exposure Limits](#)

[Occupational/Controlled Exposure versus General Population/Uncontrolled Exposure](#)

Electric Field Limits

The FCC's MPE limits for the two classes of exposure are shown in the tables below. Limits are spatially averaged over the whole body. The Occupational/Controlled limits are time averaged over 6 minutes. Time averaging is not allowed for the more restrictive General Population/Uncontrolled exposure MPE limits.

MPE Limits for Occupational/Controlled Exposure

Frequency (MHz)	Power Density (mW/cm ²)
0.03–1.34	100
1.34–30	900/f ²
30–300	1.0
300–1,500	f/300
1,500–100,000	5.0

MPE Limits for General Population/Uncontrolled Exposure

Frequency (MHz)	Power Density (mW/cm ²)
0.03–1.34	100
1.34–30	180/f ²
30–300	0.2
300–1,500	f/1500
1,500–100,000	1.0

Magnetic field limits are higher below 100 MHz.

Induced and Contact Current Limits

Although the FCC announced plans to issue exposure limits for induced and contact currents when the field strength limits became effective in 1997, there has been no further action taken. Part of the problem is the difficulty in making the measurements. It is far more difficult to make current measurements than field strength measurements, and the lack of interest led the major manufacturer of such equipment, Narda Safety Test Solutions, to discontinue its series of current measurement products. The lack of suitable equipment, the difficulty in making measurements, and the change in personnel

Resources

[Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields, OET Bulletin 65](#)

[Supplement A to OET Bulletin 65, Additional Information for Radio and Television Broadcast Stations](#)

[Supplement B to OET Bulletin 65, Additional Information for Amateur Radio Stations](#)

[Supplement C to OET Bulletin 65, Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions](#)



at the FCC makes the issuance of additional RF safety regulations unlikely.

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