



iPhone 3G

Important Product
Information Guide

Exposure to Radio Frequency Energy iPhone contains radio transmitters and receivers. When on, iPhone receives and sends out radio frequency (RF) energy through its antenna. The iPhone cellular antenna is located on the back of iPhone near the dock connector. The Wi-Fi and Bluetooth® antenna is located near the back top edge of the iPhone. iPhone is designed and manufactured to comply with the limits for exposure to RF energy set by the Federal Communications Commission (FCC) of the United States, Industry Canada (IC) of Canada, and regulating entities of Japan, the European Union, and other countries. The exposure standard employs a unit of measurement known as the specific absorption rate, or SAR. The SAR limit applicable to iPhone set by the FCC is 1.6 watts per kilogram (W/kg), 1.6 W/kg by Industry Canada, and 2.0 W/kg by the Council of the European Union. Tests for SAR are conducted using standard operating positions (i.e., at the ear and worn on the body) specified by these agencies, with iPhone transmitting at its highest certified power level in all tested frequency bands. Although SAR is determined at the highest certified power level in each frequency band, the actual SAR level of iPhone while in operation can be well below the maximum value because iPhone adjusts its cellular transmitting power based in part on proximity to the wireless network. In general, the closer you are to a cellular base station, the lower the cellular transmitting power level.

iPhone has been tested,² and meets the FCC, IC, and European Union RF exposure guidelines for cellular, Wi-Fi, and Bluetooth operation. When tested for use at the ear and for body-worn operation (with iPhone positioned 15 mm (5/8 inch) from the body), iPhone's maximum SAR value for each frequency band is outlined below:

Frequency Band	Body	Ear	FCC & IC 1g SAR Limit (W/kg)
GSM 850	0.52	0.63	1.6
GSM 1900	0.26	0.79	1.6
UMTS II 1900	0.33	1.19	1.6
UMTS V 850	0.67	0.56	1.6
Wi-Fi	0.06	0.52	1.6

² The device was tested by Compliance Certification Services, Fremont, CA according to measurement standards and procedures specified in FCC OET Bulletin 65, Supplement C (Edition 01-01) and IEEE P1528.1, April 21 2003 and Canada RSS 102. iPhone adheres to the European Council Recommendation of 12 July 1999 on the Limitation of Exposure of the General Public to Electromagnetic Fields [1999/519/EC].

Frequency Band	Body	Ear	EU 10g SARLimit (W/kg)
EGSM 900	0.45	0.40	2.0
GSM 1800	0.19	0.72	2.0
UMTS I 2100	0.42	1.10	2.0
Wi-Fi	0.04	0.24	2.0

iPhone's SAR measurement may exceed the FCC exposure guidelines for body-worn operation if positioned less than 15 mm (5/8 inch) from the body (e.g. when carrying iPhone in your pocket). For optimal mobile device performance and to be sure that human exposure to RF energy does not exceed the FCC, IC, and European Union guidelines, always follow these instructions and precautions: When on a call using the built-in audio receiver in iPhone, hold iPhone with the dock connector pointed down toward your shoulder to increase separation from the antenna. When using iPhone near your body for voice calls or for wireless data transmission over a cellular network, keep iPhone at least 15 mm (5/8 inch) away from the body, and only use carrying cases, belt clips, or holders that do not have metal parts and that maintain at least 15 mm (5/8 inch) separation between iPhone and the body.

If you are still concerned about exposure to RF energy, you can further limit your exposure by limiting the amount of time using iPhone, since time is a factor in how much exposure a person receives, and by placing more distance between your body and iPhone, since exposure level drops off dramatically with distance.

Additional Information For more information from the FCC about exposure to RF energy, see: www.fcc.gov/oet/rfsafety

The FCC and the U.S. Food and Drug Administration (FDA) also maintain a consumer website at www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm to address inquiries about the safety of mobile phones. Please check the website periodically for updates.

For information about the scientific research related to RF energy exposure, see the EMF Research Database maintained by the World Health Organization at: www.who.int/emf

Radio Frequency Interference Radio-frequency emissions from electronic equipment can negatively affect the operation of other electronic equipment causing them to malfunction. Although iPhone is designed, tested, and manufactured to comply with regulations governing radio frequency emission in countries such as the United States, Canada, the European Union, and Japan, the wireless transmitters and electrical circuits in iPhone may cause interference in other electronic equipment. Therefore, please take the following precautions:

Aircraft Use of iPhone may be prohibited while traveling in aircraft. For more information about using Airplane Mode to turn off the iPhone wireless transmitters, see the *iPhone User Guide*.