



# RF Exposure Web Site Draft

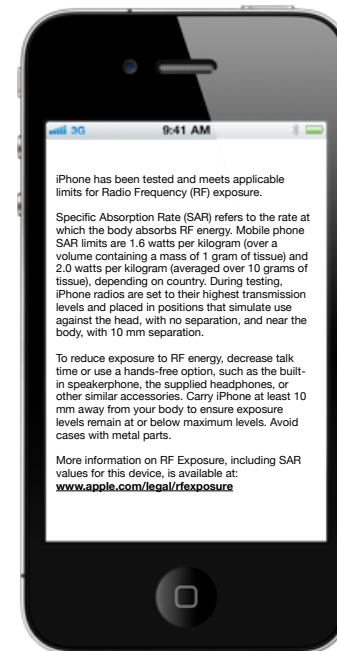
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Last updated: August 17, 2012

# Overview

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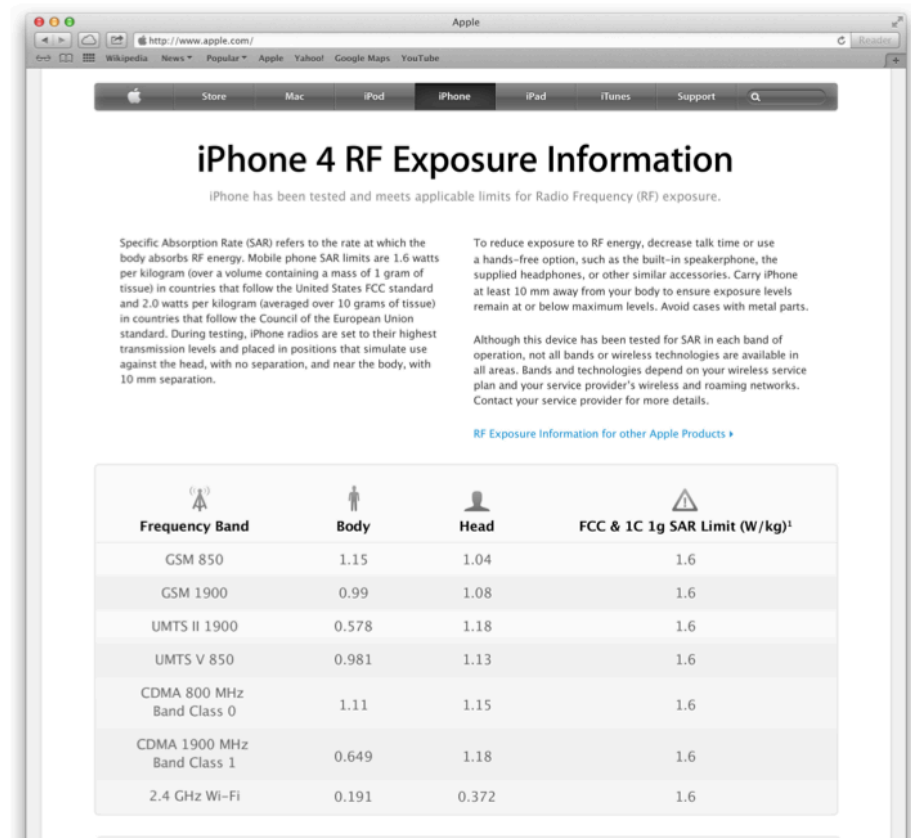
- On-device information:
  - On Device page will include pointer to web page for device-specific & language-specific SAR information
  - Currently being implemented in iOS 6
- Online page:
  - Contains device-specific SAR numbers (see next slide for details)



# Sample RF Exposure Web page DRAFT

Contains:

- Title identifies product
- Repeats RF warning text from the device
- Contains Table of SAR information



The screenshot shows a web browser window displaying the "iPhone 4 RF Exposure Information" page. The page title is "iPhone 4 RF Exposure Information" and the subtitle is "iPhone has been tested and meets applicable limits for Radio Frequency (RF) exposure." The page contains two columns of text explaining SAR limits and testing procedures. Below the text is a table with four columns: Frequency Band, Body, Head, and FCC & IC 1g SAR Limit (W/kg)<sup>1</sup>. The table lists various frequency bands and their corresponding SAR values for the body and head, all of which are within the 1.6 W/kg limit.

Frequency Band	Body	Head	FCC & IC 1g SAR Limit (W/kg) <sup>1</sup>
GSM 850	1.15	1.04	1.6
GSM 1900	0.99	1.08	1.6
UMTS II 1900	0.578	1.18	1.6
UMTS V 850	0.981	1.13	1.6
CDMA 800 MHz Band Class 0	1.11	1.15	1.6
CDMA 1900 MHz Band Class 1	0.649	1.18	1.6
2.4 GHz Wi-Fi	0.191	0.372	1.6

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# Sample SAR Page Content – iPhone 3GS

- Final SAR web page will consolidate bands as much as possible, per the table to the right
- The purpose is to make the information more accessible to consumers by consolidating the rows where possible

Air Interface & Band	Frequency Band (MHz)	FCC 1g SAR Limit (W/kg)	Body	Head
GSM 850 UMTS 850	824–849	1.6	0.67	0.63
GSM 1900 UMTS 1900	1850–1910	1.6	0.33	1.19
2.4 GHz Wi-Fi	2400–2483.5	1.6	0.06	0.52
Air Interface & Band	Frequency Band (MHz)	EU 10g SAR Limit (W/Kg)	Body	Head
EGSM 900 UMTS 900	880–915	2.0	0.45	0.40
GSM 1800	1710–1784	2.0	0.19	0.72
UMTS 2100	1920–1980	2.0	0.42	1.10
2.4 GHz Wi-Fi	2400–2483.5	2.0	0.04	0.24

# Footnotes on Each Web Page

Frequency Band <sup>2</sup>	Body <sup>3</sup>	Head	FCC & IC 1g SAR Limit (W/kg) <sup>1</sup>
GSM 850	1.15	1.04	1.6
GSM 1900	0.99	1.08	1.6
UMTS II 1900	0.578	1.18	1.6
UMTS V 850	0.981	1.13	1.6
CDMA 800 MHz Band Class 0	1.11	1.15	1.6
CDMA 1900 MHz Band Class 1	0.649	1.18	1.6
2.4 GHz Wi-Fi	0.191	0.372	1.6

Frequency Band <sup>2</sup>	Body <sup>3</sup>	Head	EU 10g SAR Limit (W/kg) <sup>2</sup>
EGSM 900	0.989	0.766	2.0
GSM 1800	0.695	0.959	2.0
UMTS I 2100	0.495	0.98	2.0
UMTS VIII 900	0.681	0.988	2.0
2.4 GHz Wi-Fi	0.106	0.267	2.0

- fn1 – FCC OET Bulletin 65, Supplement C (Edition 01-01) & IEEE 1528-2003, & Canada RSS 102, Issue 4, March 2010.
- fn2 – European Council Recommendation of 12 July 1999 on the Limitation of Exposure of the General Public to Electromagnetic Fields [1999/519/EC].

# Approach Only for iOS 6 Devices

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- All devices capable of running iOS 6 (see below)
- **Plus** Fall-release iOS devices (A18, A19, A21, C1x)



iOS 6 is compatible with:



iPhone 3GS



iPhone 4



iPhone 4S



iPod touch  
4th generation



iPad 2



The new iPad

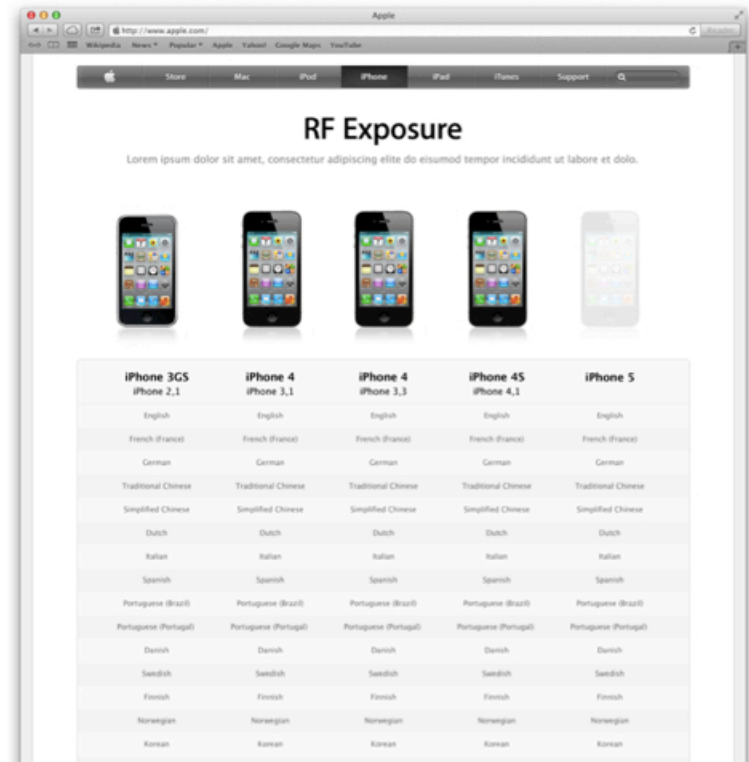
## Localized by iOS Languages

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- English / Universal Default – English Language plus universal icons
- iOS languages: French (France), German, Traditional Chinese, Simplified Chinese, Dutch, Italian, Spanish, Portuguese (Brazil), Portuguese (Portugal), Danish, Swedish, Finnish, Norwegian, Korean, Japanese, Russian, Polish, Turkish, Ukrainian, Hungarian, Arabic, Thai, Czech, Greek, Hebrew, Indonesian, Malay, Romanian, Slovak, Croatian, Catalan, and Vietnamese

# General access via web

- General landing page accessible from web site
  - Contains pointers to device-specific SAR information





# RF Exposure Statements for device & web

# iPhone RF Exposure Statement

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iPhone has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per Kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/Kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. During testing, iPhone radios are set to their highest transmission levels and placed in positions that simulate use against the head, with no separation, and near the body, with 10 mm separation.

To reduce exposure to RF energy, use a hands-free option, such as the built-in speakerphone, the supplied headphones, or other similar accessories. Carry iPhone at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified.

SAR values for this device are available at: [www.apple.com/legal/rfexposure/\[MODEL\]](http://www.apple.com/legal/rfexposure/[MODEL])

Although this device has been tested to determine SAR in each band of operation, not all bands are available in all areas. Bands are dependent on your service provider's wireless and roaming networks.

# iPad RF Exposure Statement

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iPad has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per Kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/Kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. During testing, iPad radios are set to their highest transmission levels and placed in positions that simulate use against the body. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified.

***[FOLLOWING TEXT FOR CELLULAR VERSION ONLY]*** SAR values for this device are available at: [www.apple.com/legal/rfexposure/\[MODEL\]](http://www.apple.com/legal/rfexposure/[MODEL])

Although this device has been tested to determine SAR in each band of operation, not all bands are available in all areas. Bands are dependent on your service provider's wireless and roaming networks.

# iPod touch RF Exposure Statement

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iPod touch has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per Kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/Kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. During testing, iPod touch radios are set to their highest transmission levels and placed in positions that simulate use against the body. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified.

# iPod nano RF Exposure Statement

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***[PRINT ONLY - NOT ON DEVICE]***

iPod nano has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per Kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/Kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. During testing, iPod nano radios are set to their highest transmission levels and placed in positions that simulate use against the body. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified.