

# データ通信端末の比吸収率（SAR）について / Specific Absorption Rate (SAR) of Mobile

## Terminals

### 1. F-02K の SAR / About SAR of F-02K

（日本語）

この機種【F-02K】は、国が定めた電波の人体吸収に関する技術基準および電波防護の国際ガイドラインに適合しています。

このデータ通信端末は、国が定めた電波の人体吸収に関する技術基準(※1)ならびに、これと同等な国際ガイドラインが推奨する電波防護の許容値を遵守するよう設計されています。この国際ガイドラインは世界保健機関（WHO）と協力関係にある国際非電離放射線防護委員会（ICNIRP）が定めたものであり、その許容値は使用者の年齢や健康状況に関係なく十分な安全率を含んでいます。

国の技術基準および国際ガイドラインは電波防護の許容値を人体に吸収される電波の平均エネルギー量を表す比吸収率（SAR : Specific Absorption Rate）で定めており、本データ通信端末に対する SAR の許容値は 2.0W/kg です。取扱説明書に記述する通常使用の場合、このデータ通信端末の SAR の最大値は **1.015W/kg**(※2)です。個々の製品によって SAR に多少の差異が生じることもありますが、いずれも許容値を満足しています。

データ通信端末は、携帯電話等基地局との通信に必要な最低限の送信電力になるよう設計されているため、実際に通信している状態では、通常 SAR はより小さい値となります。一般的には、基地局からの距離が近いほど、データ通信端末の出力は小さくなります。

通信中は、身体から 1.5 センチ以上離し、かつその間に金属（部分）が含まれないようにしてください。このことにより、本データ通信端末が国の技術基準および電波防護の国際ガイドラインに適合していることを確認しています。

世界保健機関は、『携帯電話が潜在的な健康リスクをもたらすかどうかを評価するために、これまで 20 年以上にわたって多数の研究が行われてきました。今日まで、携帯電話使用によって生じるとされる、いかなる健康影響も確立されていません。』と表明しています。

さらに詳しい情報をお知りになりたい場合には世界保健機関のホームページをご参照ください。

[http://www.who.int/docstore/peh-emf/publications/facts\\_press/fact\\_japanese.htm](http://www.who.int/docstore/peh-emf/publications/facts_press/fact_japanese.htm)

SAR について、さらに詳しい情報をお知りになりたい方は、下記のホームページをご参照ください。

総務省のホームページ <http://www.tele.soumu.go.jp/j/sys/ele/index.htm>

一般社団法人電波産業会のホームページ <http://www.arib-emf.org/01denpa/denpa02-02.html>

富士通のホームページ <http://www.fmworld.net/product/phone/sar/>

※1 技術基準については、電波法関連省令（無線設備規則第 14 条の 2）で規定されています。

※2 LTE/FOMA と同時に使用可能な無線機能を含みます。

**(In English)**

**This model [F-02K] device complies with Japanese technical regulations and international guidelines regarding exposure to radio waves.**

This device was designed in observance of Japanese technical regulations regarding exposure to radio waves (\*1) and limits to exposure to radio waves recommended by a set of equivalent international guidelines. This set of international guidelines was set out by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), which is in collaboration with the World Health Organization (WHO), and the permissible limits include a substantial safety margin designed to assure the safety of all persons, regardless of age and health condition.

The technical regulations and international guidelines set out limits for radio waves as the Specific Absorption Rate, or SAR, which is the value of absorbed energy in any 10 grams of tissue over a 6-minute period. The SAR limit for mobile terminals is 2.0 W/kg. The highest SAR value for this device when tested for intended use described in the instruction manual is **1.015 W/kg** (\*2). There may be slight differences between the SAR levels for each product, but they all satisfy the limit.

The actual SAR of this device while operating can be well below that indicated above. This is due to automatic changes to the power level of the device to ensure it only uses the minimum required to reach the network. Therefore in general, the closer you are to a base station, the lower the power output of the device.

During communication, please keep the device farther than 1.5 cm away from your body without including any metals. This device satisfies the technical regulations and international guidelines.

The World Health Organization has stated that "a large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."

Please refer to the WHO website if you would like more detailed information.

[http://www.who.int/docstore/peh-emf/publications/facts\\_press/fact\\_english.htm](http://www.who.int/docstore/peh-emf/publications/facts_press/fact_english.htm)

Please refer to the websites listed below if you would like more detailed information regarding SAR.

Ministry of Internal Affairs and Communications Website: <http://www.tele.soumu.go.jp/e/sys/ele/index.htm>

Association of Radio Industries and Businesses Website: <http://www.arib-emf.org/01denpa/denpa02-02.html>

(in Japanese only)

FUJITSU LIMITED Website: <http://www.fmworld.net/product/phone/sar/> (in Japanese only)

\*1 Technical regulations are defined by the Ministerial Ordinance Related to Radio Law (Article 14-2 of Radio Equipment Regulations).

\*2 Including other radio systems that can be simultaneously used with LTE/FOMA.

## 2. About SAR of F-02K for FCC RF exposure requirements

### FCC RF Exposure Information

This tablet device meets the U.S. Government's requirements for exposure to radio waves.

This tablet device contains a radio transmitter and receiver. This tablet device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy as set by the FCC of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies.

The exposure standard for wireless tablet device employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions as accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network.

In general, the closer you are to a wireless base station antenna, the lower the power output level of the device. Before a tablet model is available for sale to the public, it must be tested and certified to prove to the FCC that it does not exceed the limit established by the U.S. government-adopted requirement for safe exposure. The tests are performed on position and locations (for example, worn on the body) as required by FCC for each model. The highest SAR value for this tablet device as reported to the FCC, when worn on the body, is **1.20 W/kg\***. (Body-worn measurements differ among tablet models, depending upon available accessories and FCC requirements).

While there may be differences between the SAR levels at various positions, they all meet the U.S. government requirements. The FCC has granted an Equipment Authorization for this tablet device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this tablet device is on file with the FCC and can be found under the Equipment Authorization Search section at

<http://www.fcc.gov/oet/ea/fccid/> (please search on **FCC ID VQK-F02K**).

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines.

Please use an accessory designated for this product or an accessory which contains no metal and which positions the device a minimum of 1.5 cm from the body.

·In the United States, the SAR limit for wireless tablet device used by the general public is 1.6 Watts/kg (W/kg), averaged over one gram of tissue. SAR values may vary depending upon national reporting requirements and the network band.

\* Including other radio systems that can be simultaneously used with cellular radio wave.

### 3. About SAR of F-02K for EU RF exposure requirements

#### Declaration of Conformity

Trade Mark: Fujitsu

Model Name: F-02K

Hereby, Fujitsu Connected Technologies Ltd. declares that the RE product of "F-02K" is in compliance with RED 2014/53/EU.

The full text of the EU DoC is available at the following internet address:

<https://www.fmworld.net/product/phone/doc/>

This tablet device complies with the EU requirements for exposure to radio waves. Your device is a radio transceiver, designed and manufactured not to exceed the SAR\*1 limits\*2 for exposure to radio-frequency (RF) energy, which SAR\*1 value, when tested for compliance against the standard was **1.26 W/kg**\*3 for BODY. While there may be differences between the SAR\*1 levels of various devices and at various positions, they all meet\*4 the EU requirements for RF exposure.

\*1 The exposure standard for tablet devices employs a unit of measurement known as the Specific Absorption Rate, or SAR.

\*2 The SAR limit for tablet devices used by the public is 2.0 watts/kilogram (W/kg) averaged over ten grams of tissue, recommended by The Council of the European Union. The limit incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

\*3 Including other radio systems that can be simultaneously used with cellular radio wave.

\*4 Tests for SAR have been conducted using standard operation positions with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a base station antenna, the lower the power output.