

## データ通信端末の電波防護への適合性について

この機種【SH-54C】は、国が定めた電波の人体吸収に関する技術基準に適合しています。

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)を遵守するよう設計されています。この技術基準は、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）や米国電気電子学会（IEEE）電磁界安全に係る国際委員会（ICES）が定める電波防護許容値との整合性を考慮しつつ国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、6 GHz 以下の周波数の場合）および電力密度（PD：Power Density、6 GHz を超える周波数の場合）で定めており、本データ通信端末に対する SAR、PD の許容値はそれぞれ 2 W/kg、2 mW/cm<sup>2</sup> です。また、それぞれの指標で評価すべき無線機能が同時に動作する場合には、総合照射比で示すことを規定しています。総合照射比が 1 以下であれば、許容値を満足しています。

このデータ通信端末の総合照射比については、通常使用の場合の最大値：**0.979** (※2)となっています(※3)。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、PD はより小さい値となります。個々の製品によってこれらの数値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。

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。

<https://www.who.int/news-room/fact-sheets/detail/electromagnetic-fields-and-public-health-mobile-phones>

データ通信端末の電波防護について、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

<https://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

<https://www.arib-emf.org/01denpa/denpa02-02.html>

ドコモのホームページ

<https://www.docomo.ne.jp/product/sar/>

シャープ株式会社のホームページ

<http://k-tai.sharp.co.jp/support/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 5G/LTE と同時に使用可能な無線機能を含みます。

※3 このデータ通信端末の総合照射比を算出するために使用した値は、SAR 0.367 W/kg、PD 1.59 mW/cm<sup>2</sup>です。

## Compliance Information on Human Exposure to Radio Waves of Mobile Terminals

**This model [SH-54C] device complies with the Japanese technical regulations regarding human exposure to radio waves.**

This device was designed in observance of the Japanese technical regulations regarding human exposure to radio waves (\*1). These technical regulations are consistent with the limits of human exposure to radio waves established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), which is in collaboration with the World Health Organization (WHO), and the International Committee on Electromagnetic Safety (ICES) in the IEEE. The permissible limits include substantial safety margins designed to assure the safety of all persons, regardless of age and health conditions.

The technical regulations set out the limits of exposure to radio waves as the SAR (Specific Absorption Rate, for up to 6 GHz) and the PD (Power Density, for above 6 GHz), and the limits for the SAR and the PD for mobile terminals are 2 W/kg and 2 mW/cm<sup>2</sup>, respectively. If mobile terminal supports simultaneous transmission of the frequency bands which should be evaluated in the SAR and PD, the technical regulations require that the Total Exposure Ratio (TER) should be used to indicate its compliance. The TER of less than or equal to 1 indicates the mobile terminal satisfies the limits.

The TER for this device when tested for intended use described in the instruction manual is **0.979** (\*2) (\*3). There may be slight differences of the SAR and PD values in individual product, but they all satisfy the limits. The actual values of SAR and PD of this device while operating can be well below the indicated above. This is due to automatic changes in the power level of the device to ensure it only uses the minimum power required to access the network.

During communication, please keep the device farther than 1.5 cm away from your body without including any metals. This device is certified the compliance with the Japanese technical regulations.

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.

<https://www.who.int/news-room/fact-sheets/detail/electromagnetic-fields-and-public-health-mobile-phones>

Please refer to the websites listed below if you would like more detailed information regarding protection against human exposure to radio waves.

Ministry of Internal Affairs and Communications Website:

<https://www.tele.soumu.go.jp/e/sys/ele/index.htm>

Association of Radio Industries and Businesses Website:

<https://www.arib-emf.org/01denpa/denpa02-02.html> (in Japanese only)

NTT DOCOMO, INC. Website:

<https://www.docomo.ne.jp/english/product/sar/>

SHARP Corporation Website:

<http://k-tai.sharp.co.jp/support/sar/> (in Japanese only)

- \*1 The technical regulations are provided in Article 14-2 of Radio Equipment Regulations, a Ministerial Ordinance of the Radio Act.
- \*2 Including other radio systems that can be simultaneously used with 5G/LTE.
- \*3 The SAR and PD values used for obtaining TER for this mobile terminal are: SAR of 0.367 W/kg and PD of 1.59 mW/cm<sup>2</sup>.

## FCC RF Exposure Information

Your device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model device when tested for intended use described in the instruction manual is **1.20 W/kg**. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines. During communication, please use an accessory designated for this product or an accessory which contains no metal and which positions the device a minimum of 1.0 cm from the body.

The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided. The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of <https://www.fcc.gov/oet/ea/fccid> on FCC ID **APYHRO00322**. Additional information on Specific Absorption Rates (SAR) can be found on the FCC website at <https://www.fcc.gov/general/radio-frequency-safety-0>.

## European RF Exposure Information

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection of all persons, regardless of age and health.

The guidelines use a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit for mobile devices is 2 W/kg and the highest SAR value for this device when tested for intended use described in the instruction manual is **1.49 W/kg**※.

During communication for body-worn operation, this mobile device has been tested and meets the RF exposure guidelines when used with an accessory containing no metal and positioning the devices a minimum of 5 mm from the body. Use of other accessories may not ensure compliance with RF exposure guidelines.

As SAR is measured utilizing the devices highest transmitting power the actual SAR of this device while operating is typically below that indicated above. This is due to automatic changes to the power level of the device to ensure it only uses the minimum level required to reach the network.

※ The tests are carried out in accordance with international guidelines for testing.