

**User Guide Information to 2.4GHz Bluetooth™ Module  
Model UGPZ6-C3**

**Caution: This user guide information is only provided to OEM or module installer.  
Do not supply to the end user.**

**1. Introduction:**

The Bluetooth Transceiver module, UGPZ6-C3 with Bluetooth™ wireless technology is a radio device that transmits and receives radio signals in accordance with the spectrum regulations for the 2.4 GHz unlicensed frequency range.

The following table shows a major function.

Model No.	Major Function	Remarks
UGPZ6-C3	1. Output Power; Bluetooth™ class 2. 2.5mW (+4dBm) Max. 2. External antennas connected via antenna connector. 3. Voltage regulator built in. Rating of Input voltage: +3.3Vdc, +/-0.2V 4. Flash memory (2M bytes) built in 5. Reference oscillator built in 6. Board to board connection through USB interfaces, V2.0 7. Operating temperature: Nominal; +15 °C to +35 °C 8. Regulatory frequency range USA, Canada, Europe, Taiwan, Korea, China and Japan: 2400 – 2483.5MHz	

Electrical features	Contents
Program memory	2M bits (256k bytes x 32 bits) Flash memory
RAM	32k bytes x 16 bits
Reference oscillator	Built in
Sub clock oscillator	Built in
USB interface	USB (V2.0) : OHCI and UHCI

The UGPZ6-C3 is based on Bluetooth specification, Version 2.0 + EDR.

**2. Eligibility requirements for regulatory approval:**

As a part of regulatory certification, ALPS will provide an approval for certain countries in the form of modular approval (MA) .

The regulatory approval is required for each country throughout world where the end-user wishes to use UGPZ6-C3 into entire end product, if no certification program for the modular approval exists in the country.

The countries that can accept MA include the USA, Canada, and certain European countries.

The conditions for approval of UGPZ6-C3 and related information for each country are described below.

ALPS wishes that our customer for end product would contact with us about what module of UGPZ6-C3 has been certified for each country.

## 2.1 USA

### 2.1.1 Compliance statement to FCC

This module complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### 2.1.2 RF exposure compliance

This module may be installed into any end product in mobile device applications.

For Mobile Configuration, this module complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. It is desirable that it should be installed and operated with at least 20cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and legs).

The module installer shall obtain FCC approval for the end product, if the module is used for Portable application.

### 2.1.3 Requirements to end product

The following provisions for end product will be required on the FCC regulation, part 15.

#### (1) Antenna

We wish that module installer shall use the UGPZ6-C3 module without any modifications including antenna. If module installer uses a unique antenna, the FCC certification is required for the end product.

#### (2) Co-location.

This UGPZ6-C3 module must not be co-located or operated in conjunction with any other antenna or transmitter.

#### (3) Markings

To satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product.

**Contains Transmitter Module FCC ID: CWTUGPZ6-C3**

Any similar wording that expresses the same meaning may be used.

#### (4) Caution to user for modification

The following caution is expressed on the user's instruction manual.

**The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.**

#### (5) Compliance statement to FCC

The following statement is expressed on the user's instruction manual.

**This module complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.**

## 2.2 Canada

In general, I.C (Industry Canada) follows the FCC in terms of emission levels and other regulatory requirements.

### 2.2.1 Compliance statement for IC

This device complies with Industry Canada RSS-210. Operation is subject to the following conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### 2.2.2 RF exposure compliance

- (1) This module may be installed into any end product in mobile device applications.
- (2) The installer of this device must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website [www.hc-sc.gc.ca/rpb](http://www.hc-sc.gc.ca/rpb).

### 2.2.3 Meaning of certification number

The meaning of the marking of "IC: 1788F-UGPZ6C3" on the UGPZ module means: "1788F-UGPZ6C3" is the certification number, and the term "IC" before the equipment certification number only signifies that Industry Canada technical specifications were met.

### 2.2.4 Requirements to end product

The following provisions for end product will be required on the Canada regulation.

#### (1) Antenna

ALPS wishes that module installer uses the UGPZ6-C3 module without any modifications including antenna. If module installer uses a unique antenna, the I.C certification is required for the end product.

#### (2) Markings

To satisfy Industry Canada exterior labeling requirements, the following text must be placed on the exterior of the end product.

**Contains Transmitter Module IC: 1788F-UGPZ6C3**

Any similar wording that expresses the same meaning may be used.

## 2.3 Indonesia

The UGPZ6-C3 module has the following information on Indonesia certification.

#### 1) Model number

UGPZ6-C3

#### 2) Marking: "POSTEL" and xxxx (Certificate ID) , yyyy (certificate year) and zzzz(Plug. ID) as shown in below.

**xxxxx/POSTEL/yyyy  
zzzz**

## 2.4 Malaysia

The UGPZ6-C3 module has the following information on the certification.

#### 1) Model number

UGPZ6-C3

#### 2) Certificate number:

#### 3) Purchasing the certification label

The certified company shall purchase the certification label.

Because of that the module is a small and has no spacing to put on the label, it is attached on the end product.

#### 4)The expire date of the certificate will be until mm/dd/yyyy.

## 2.5 Japan

### 2.5.1 Radio law (TELEC or other registered certificate agency)

The module installer for the end product will not require the certification of TELEC or other registered certificate agency for the end product, where UGPZ6-C3 module with TELEC or other registered certificate agency certification shall be incorporated in the following applications.

(1) Antenna

The module installer shall use the UGPZ6-C3 module without any modifications including antenna.

If module installer uses a unique antenna, the re-certification to TELEC or other registered certificate agency will be required for the UGPZ6-C3 module.

Thus, module installer would be required to contact with us before the modification of the antenna.

(2) The outer cabinet of the end product shall be fixed by easily access method, such fixing with plus / minus screws to open the outer cabinet by general public.

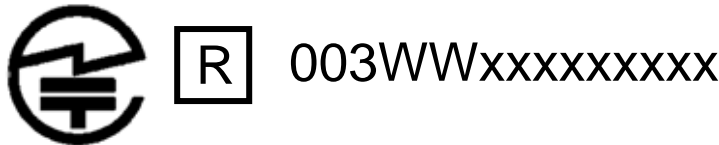
The permanently fixing method, such using security screws are not allowed for mounting method.

The labeling to exterior of the end product has a meaning of "Contains transmitter device certified under Japanese radio law ", or similar wordings. (see below)

「電波法適合無線設備を内蔵」  
( "Contains transmitter device certified under Japanese radio law " )

(3) Where outer cabinet of the end product containing UGPZ6-C3 module is secured by the permanently securing method, such using security screws, the module installer for the end product shall obtain TELEC or other registered certificate agency certification by themselves for the end product, even if UGPZ6-C3 module has been certified by TELEC or other registered certificate agency.

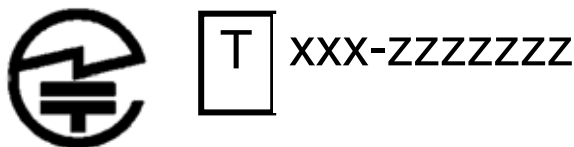
The marking on the module is as follows.



### 2.5.2 Telecommunications law (JATE or other registered testing house)

The end product containing UGPZ6-C3 module shall be certified by JATE or other registered testing house, where the end product is **directly connected** to telecommunication line, such public telephone, even if UGPZ6-C3 module has been certified by JATE or other registered testing house, or not.

The marking on the module is as follows.



### 2.5.3 Wireless LAN voluntary standard (ARIB)

ARIB STD-T66 is a voluntary standard in Japan.

However, we strongly recommend providing the following application for the end product.

(1) User manual.

The user manual specifies the following cautions and explanation of markings indicated on the end product.

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか、工場の製造ライン等で使用されている移動体識別用の構内無線局(免許を要する無線局)及び特定小電力無線局(免許を要しない無線局)並びにアマチュア無線局(免許を要する無線局)が運用されています。

1. この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局並びにアマチュア無線局が運用されていないことを確認して下さい。
2. 万一、この機器から移動体識別用の構内無線局に対して有害な電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等(例えば、パーティションの設置など)についてご相談して下さい。
3. その他、この機器から移動体識別用の特定小電力無線局あるいはアマチュア無線局に対して、有害な電波干渉の事例が発生した場合などの何かお困りのことが起きたときは、次の連絡先へお問い合わせください。

連絡先: \_\_\_\_\_

(2) Sticker

The end product provides a sticker describing the same cautions of user manual.  
There are no specifications for material, size and shape.

(3) Catalogue, pamphlet and web site

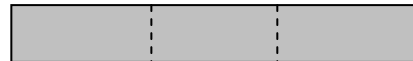
The catalogue, pamphlet and web site for the end product specify the meaning of the same cautions of user manual and meaning of markings shown in the end product.

(4) Markings on end product

The following markings are marked on the end product and its package.  
The user manual describes the meaning of the markings.  
If there is no spacing on the end product, the sticker is used as an alternate.

2 . 4 F H x

<Markings on end product>



- 1) " 2.4 " means radio operated in 2.4 GHz bands.
- 2) " FH " means modulating type, FH-SS.
- 3) " x " means that distance for interference is less than "y" m on the assumption.

Product No.	UGPZ6-C3
Output power	0dBm(1mW)
"x"	1
"y"	10m

4) "



" means the product is used in all frequency band from 2400MHz to 2483.5MHz and there are no possibilities of an avoidance to the other bands.

**CAUTION**

1. The **BLUETOOTH** trademarks are owned by **Bluetooth SIG, Inc., U.S.A.**