

TALUS

User Manual



TALUS User Manual

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Notice to Users

For applications that system failure might cause serious consequences, it is necessary to use a backup system or safety device to protect people and property from serious consequences. It is the user's responsibility to protect the consequences of system failure.

Safety Precaution

Electricity

The provided AC adapter must be used. Unauthorized power adapter is not recommended as it may cause electrical failure. Do not twist, fold, or place heavy objects on the power cable as fire may damage it. Do not touch the power plug and the adapter with wet hands. If wet, smoky, or smelly, turn off the product immediately and remove the AC adapter. Misuse can cause fire.

Product

Improper use may damage the customer's device. Do not drop the product and do not use it in humid or dusty environment. Do not press buttons or disassemble the product with excessive force, and do not place heavy objects on the product.

Revision History

Revision Date	Document Ver.	Pages Revised	Revised/Added/Removed	Details of Revision
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1. Introduction

1.1 Overview

TALUS adds a Bluetooth communication to a laptop or a PC. It is Class 1 device and supports Bluetooth v4.0 + EDR. Users can use it to communicate or manage the devices in a large factory.

Enhanced Communication Distance

The Bluetooth is an industry standard for short-range wireless communication for personal use. At the time when it was first developed, the distance was approximately 10m. However, using the Bluetooth connection to a variety of devices based on the communication range is classified into three kinds of class. The Class 1 is to have the communication distance of up to 100m, Class 2 is 30m, Class 3 supports the communication distance up to 10m. It will operate in a factories and the communication is possible without the constraints of distance.

Bluetooth v4.0 + EDR

'EDR' stands for 'Enhanced Data Rate'. THE EDR allows fast data transfer technology in Bluetooth communication. Bluetooth is initially developed to support the communication speed up to 1Mbps, but when EDR function is used, the maximum communication speed is increased up to 3Mbps. Thus TALUS allows more rapid communication.

Variety Profiles Supported

For each purpose, Bluetooth can use specific profiles for its required field. The TALUS supports SPP (Serial Port Profile), HID (Human Interface Device), A2DP (Advanced Audio Distribution Profile), and many more. Therefore, the users can use TALUS to connect to numbers of devices.

***Note:** Bluetooth 4.0 supports the AFH function. AFH is a technology that mitigates interference between WiFi and Bluetooth, and automatically avoids communication channels used by WiFi.

However, AFH does not provide complete noninterference between WiFi and Bluetooth, depending on the operating environment, such as the number of device used and the distance between them.

1.2 Package

1.2.1 Components

TALUS

- TALUS
- Stub Antenna
- CD(Installation & Documentation)

1.3 Specification

Bluetooth	Standards	Bluetooth 4.0 Class 1
	Frequency Range	2.402 ~ 2.480GHz
	Transmit Output Power	+19dBm (+6dBm EDR) E.I.R.P
	Receive Sensitivity	Basic 1Mbps: -90 dBm EDR 2Mbps: -88 dBm EDR 3Mbps: -86 dBm
	Antenna Connector	RP-SMA
	Antenna Gain	Stub Antenna: 1 dBi
	Working Distance (In Open Field)	Stub antenna – Stub antenna: 300 m ※ working distance can vary depending on install environment
	Bluetooth Stack	BlueSoleil
	Bluetooth Profiles	DUN, FAX, SPP, HID, FTP, OPP, A2DP, AVRCP, HSP, HFP, PAN, BPP
	OS Support	Windows XP/Vista/7/8/8.1 (32/64bit) Linux (3rd party driver is required) MAC OS X (MAC OS X driver is required)
Hardware	Bus Interface	USB 2.0 (Full Speed)
	Connector Type	USB Type A (Male)
	Dimension (L x W x H)	100.7 x 22.0 x 11.0mm (3.97 x 0.87 x 0.4inch)
	Weight	22g (0.78oz)
	Operating Temperature	-20 ~ 70°C (-4 ~ 158°F)
	Humidity	90% Non-condensing
	Certification	FCC, CE, MIC(TELEC), KC
	Warranty	Five Year Warranty

***Note:** Bluetooth 4.0 supports the AFH function. AFH is a technology that mitigates interference between WiFi and Bluetooth, and automatically avoids communication channels used by WiFi.

However, AFH does not provide complete noninterference between WiFi and Bluetooth, depending on the operating environment, such as the number of device used and the distance between them.

2. Get Started

This chapter describes how to install the Bluetooth software(driver) to operate TALUS.

2.1 Installing Bluetooth Software

***Note:** Bluetooth software must be installed before connecting TALUS to a PC. In addition, if Widcomm BTW or Bluetooth driver provided by Toshiba is already installed on the PC, they must be uninstalled before installing TALUS driver.

- a. Insert Bluetooth software CD-ROM.
- b. Click **Install Bluetooth Utility/Driver**.

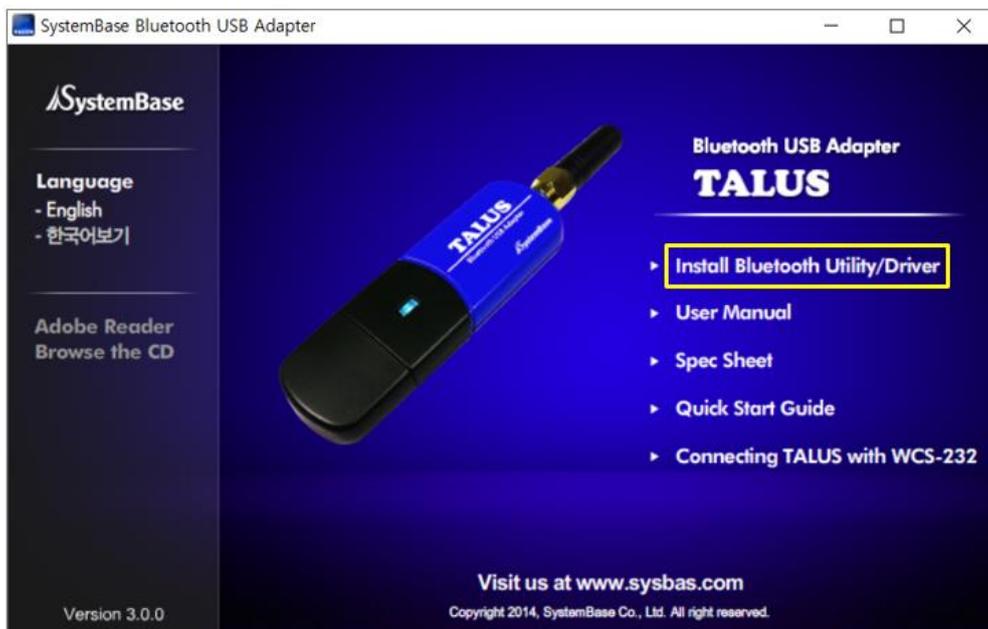


Figure 2.1 TALUS CD-ROM

- c. When the Setup Language window appears, select a language and press **OK** button.

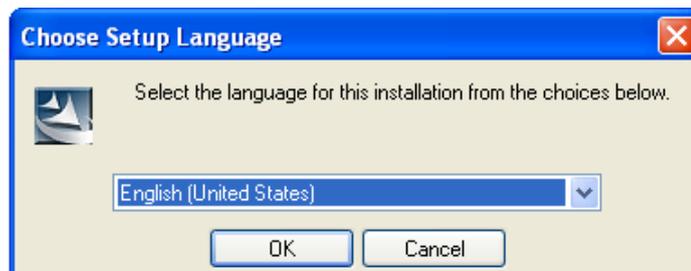


Figure 2.2 Setup Language

- d. Once InstallShield Wizard starts, press **Next** button.

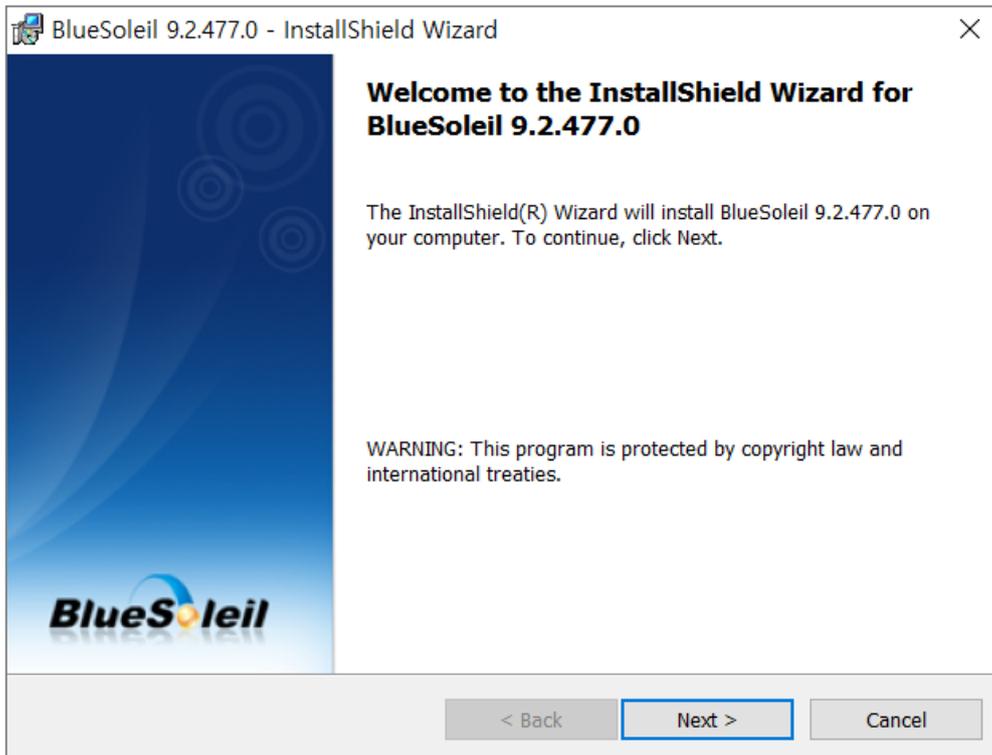


Figure 2.3 InstallShield Wizard

- e. Read the license agreement and click **I accept the terms in the license agreement** and press **Next** button.



Figure 2.4 License Agreement

- f. Click **Next** button. If you want to change the destination folder, click **Change** button and select the folder.

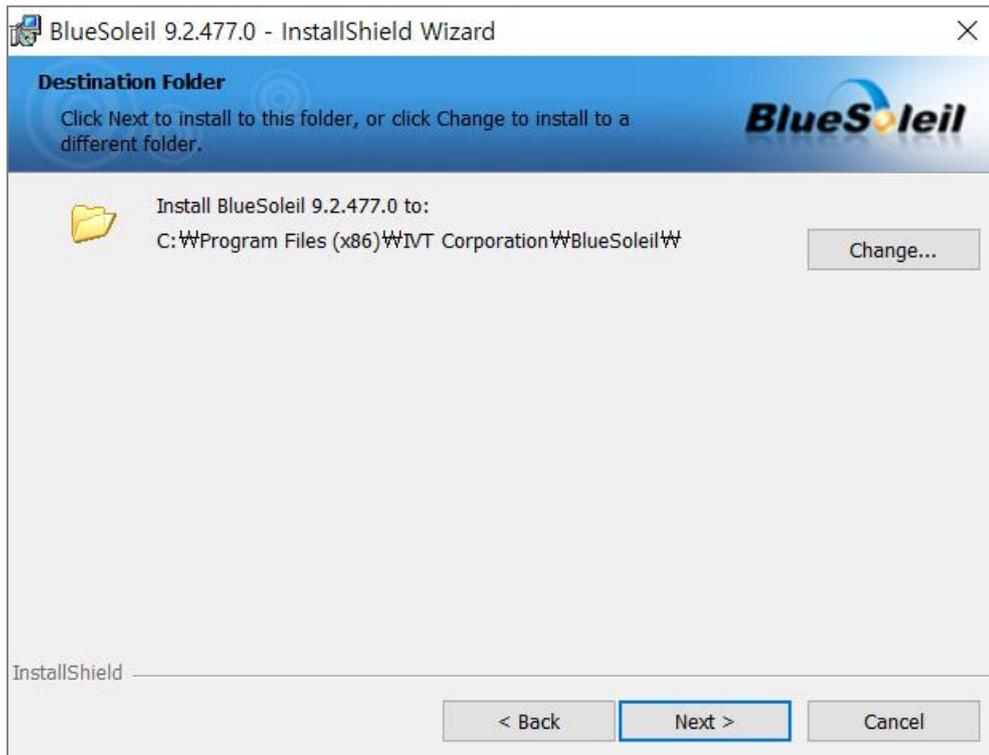


Figure 2.5 Destination Folder

- g. Click **Install** button to start the installation.

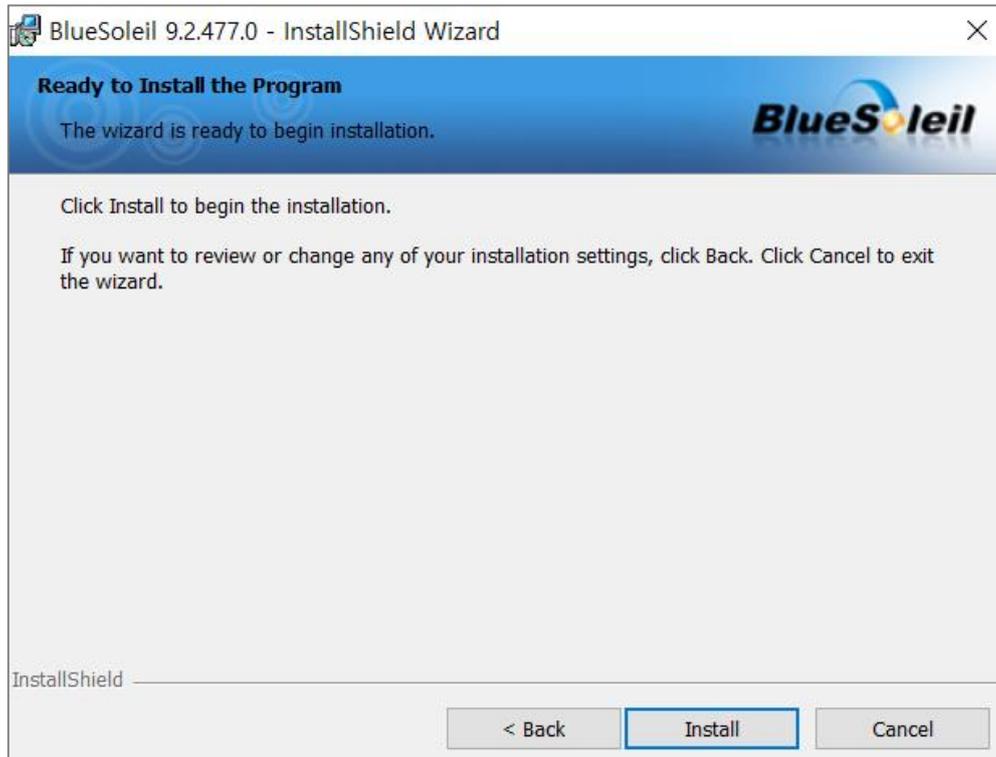


Figure 2.6 Installation

- h. When the installation is complete, click **Finish** button.

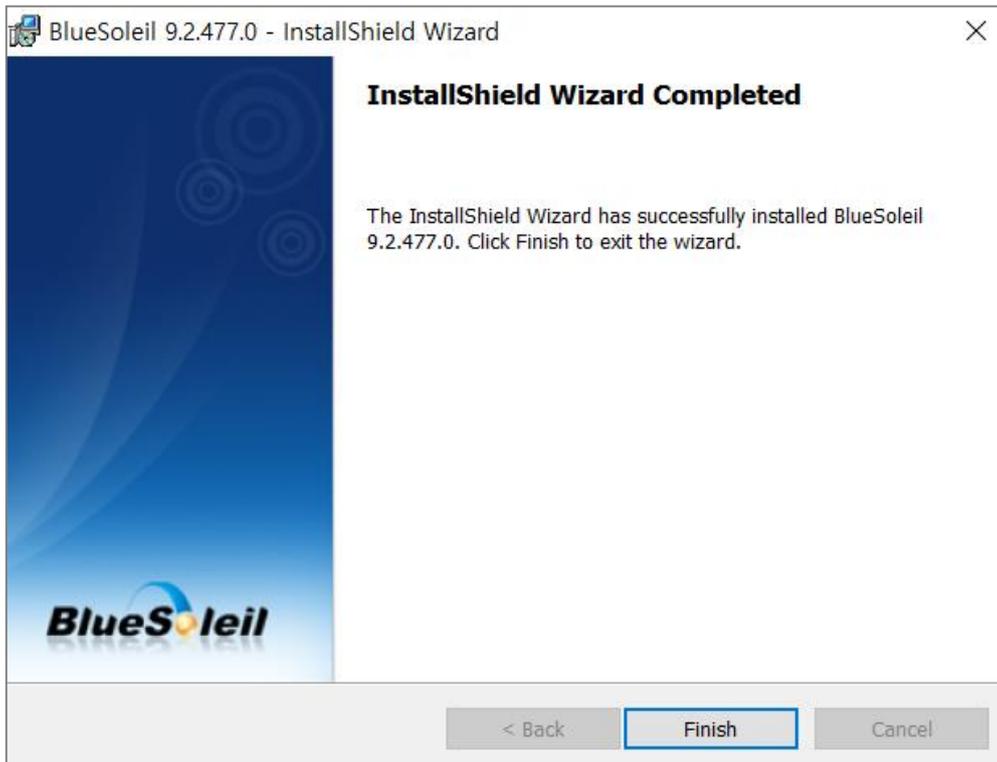


Figure 2.7 Installation Completed

- i. Press **Yes** button to reboot the PC.

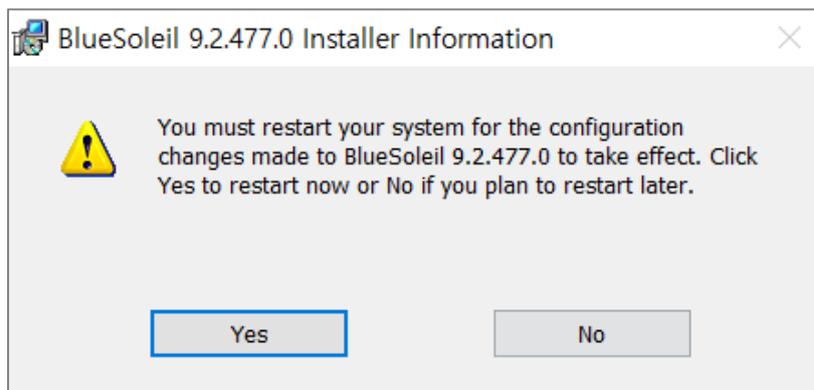


Figure 2.8 Rebooting

***Note:** You can download the latest BlueSoleil driver from SystemBase Website

<https://www.sysbas.com/en/downloads/talus/>

3. Using Bluetooth Adapter

This chapter describes how to use SPP, DUN, stereo headset and other Bluetooth services using TALUS.

3.1 Starting Bluetooth Adapter

- a. Plug the TALUS into the PC's USB port.
- b. Right-click on the Bluetooth icon on the tray and select **Turn on Bluetooth**.



Figure 3.1 Turn on Bluetooth

3.2 Searching for Bluetooth Devices

To establish Bluetooth connection, Bluetooth device must be searched for.

- a. Make the target device discoverable.
- b. Double-click on the Bluetooth icon on the tray and the BlueSoleil window will pop up.



Figure 3.2 BlueSoleil Window

- c. Double-click the My Device icon (orange ball icon) in the center of the window.
- d. After a while, the discovered Bluetooth device will be displayed



Figure 3.3 Device Search Result

3.3 Using Bluetooth Serial Port

SPP profiles enable you to create and use virtual serial ports using Bluetooth. Softwares using standard serial ports can read and write virtual serial ports using SPP just like standard serial ports. A Bluetooth password(PIN code) is required for SPP connections. Please check the PIN code of the Bluetooth target device which you are going to connect to.

- a. Double-click the My Device icon (center orange ball) to discover the appropriate Bluetooth device in the BlueSoleil window.



Figure 3.4: Device discovery

- b. Right-click on the discovered device icon to select **Search Services**.



Figure 3.5 Search Services

- c. Right-click on the discovered device icon to select **Connect Bluetooth serial port**.



Figure 3.6 Connect Bluetooth Serial Port

- d. Once the connection is complete, the Bluetooth serial port can be used.



Figure 3.7 Connection Complete

- e. To disconnect, right-click on the device icon and select **Disconnect Bluetooth Serial Port**.



Figure 3.8 Disconnect Bluetooth Serial Port

3.4 Using Dial-Up Network(DUN)

This chapter explains how to use a DUN profile to connect to the Internet using a mobile phone.

In order to use DUN, you must have a user name and password assigned from the wireless service provider to connect. Please check your user ID, password, and the phone number for your wireless service provider before the setting.

A Bluetooth password(PIN code) is also required. Please check the Bluetooth password of the phone you are trying to connect to in advance.

- a. Double-click the My Device icon(center orange ball) to discover the appropriate Bluetooth device in the BlueSoleil window.



Figure 3.9 Device Discovery

- b. Right-click on the discovered device icon to select **Search Services**.



Figure 3.10 Search Services

- c. Right-click on the discovered device icon to select **Connect Bluetooth Dial-Up Networking**.



Figure 3.11 Connect Bluetooth Dial-Up Networking

- d. Enter Bluetooth password(PIN code) and click OK button.



Figure 3.12 Entering Bluetooth Passkey

- e. Click Dial-Up Connection icon in the task bar



Figure 3.13 Dial-Up Connection Icon

- f. Enter the user name and password granted by the service provider and click **Dial** button.



Figure 3.14 Entering Username and Password

- g. Once the connection is complete, Bluetooth dial-up networking is available



Figure 3.15 Dial-Up Networking Connection

- h. To disconnect, right-click on the device icon to select **Disconnect Bluetooth Dial-Up Networking**.



Figure 3.16 Disconnect Bluetooth Dial-Up Networking

3.5 Using Bluetooth Stereo Headset

This chapter describes how to use a Bluetooth stereo headset to listen to stereo music.

A Bluetooth password(PIN code) is required for connection. Please check the Bluetooth password of the headset in advance.

- a. Set the headset to Bluetooth discoverable mode.
- b. Double-click the My Device icon(center orange ball) to search for the applicable Bluetooth device in the BlueSoleil window.



Figure 3.17 Search Headset

- c. Right-click on the discovered device icon to select **Search Services**.



Figure 3.18 Search Services

- d. Right-click on the detected headset icon to select **Connect Bluetooth Advanced Audio**.



Figure 3.19 Connect Bluetooth Advanced Audio

- e. If it is the first time connecting to the headset, enter the Bluetooth password(PIN code) if asked and click OK button.



Figure 3.20 Entering Bluetooth Password

- f. Once the connection is complete, you can listen to stereo music using Bluetooth.



Figure 3.21 Bluetooth Advanced Audio Connection

- g. To disconnect, right-click on the headset icon and select **Disconnect Bluetooth Advanced Audio**.



Figure 3.22 Disconnect Bluetooth Advanced Audio

3.6 Using Other Bluetooth Services

To use other Bluetooth services not mentioned above, please refer to the online documentation provided by the Bluetooth Manager software. To open the documentation, click **Bluetooth Places** icon on the PC, select **Menu** button → **Help** → **BlueSoleil Online Help**.

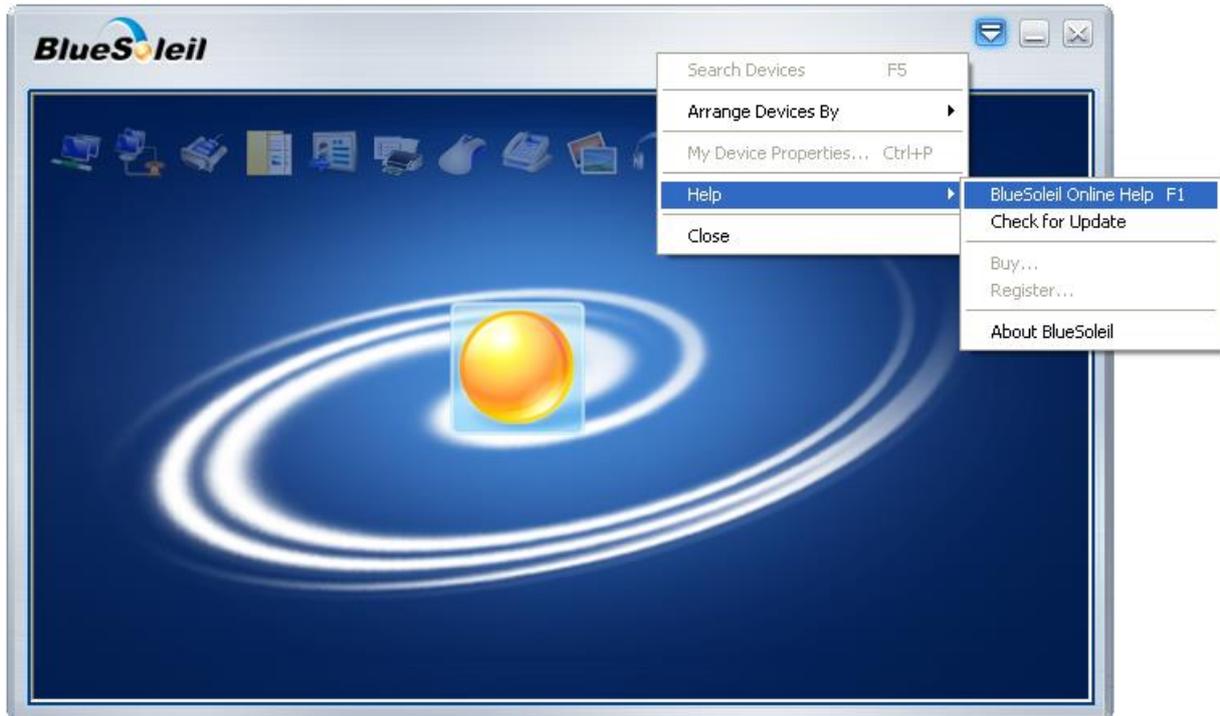


Figure 3.23 Open Online Help

5. Certification

4.1 FCC

FCC Part 15 Spread Spectrum Transmitter

FCC Digital Transmission System

FCC ID: PROTALUS2

4.2 CE



EN 301 489-1 V2.1.1

EN 301 489-17 V3.1.1

EN 300 328 V2.1.1

EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

This device can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum."

- RF Range: 2402 ~ 2480MHz (Bluetooth)

- Max. Output Power (E.I.R.P.) for Bluetooth: 6.30dBm

4.3 MIC(TELEC)

F1D 2441MHz 0.0003 ~ 0.0014W/MHz

G1D 2441MHz 0.00005 ~ 0.0003W/MHz

FID 2402 ~ 2480MHz (2000kHz間隔40波) 0.0017W

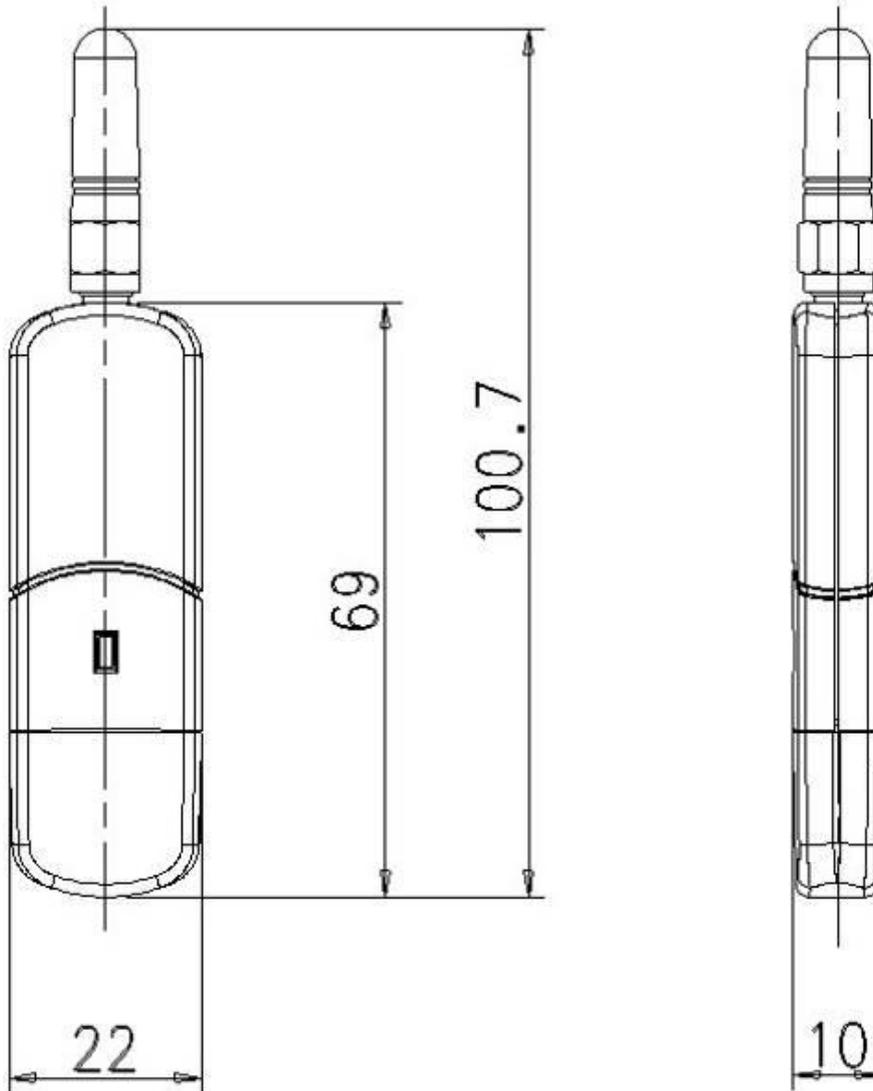
4.4 KC

Type Approval (Type Certification)

Certification No: MSIP-CRM-STB-TALUS2

Appendix A: TALUS Dimension

A.1. Dimension



Unit: mm

Appendix B: Warranty Policy

B.1. Warranty Policy

The product has passed the rigorous quality control and inspection process.

SystemBase warrants that from the date of purchase by customer, and continuing for a period of five(5) year, the Hardware will be free from defects in material and workmanship, under normal use. The warranty is limited to the repair and/or replacement parts at SystemBase's option, of the defective product during its warranty period.

Customer should obtain a Return Material Authorization(RMA) number from technical support team prior to returning the defective product to SystemBase. Shipping cost to SysemBase and to customers shall be borne by customer and SystemBase respectively.

Warranty does not apply if a product

- (a) has passed the warranty period
- (b) has been arbitrarily installed, operated, modified, disassembled, and repaired or maintained without any instructions supplied by SystemBase
- (c) has been using peripheral devices that are not provided by SystemBase
- (d) has been subjected to electrical stress, over-currents of the power used or poor device connection
- (e) has been subjected to abnormal physical stress, misuse, negligence or accident
- (f) has been subjected to natural disasters such as fire, chloride damage, flood, lightning and earthquake

For RMA, product must be in the same condition as when the product was shipped, without any damage or loss of goods and components.

For more information, please find RMA Policy on SystemBase website.



If you have any inconvenience while using the product, please contact us.

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Working Hour

MON ~ FRI 9:00 ~ 18:00