

# **ATS200 QUICK GUIDE**



ATID Co.,Ltd Ver 0.1

### **Revision History**

Version	Date	Purpose	Detail	Writer
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## **Before the Beginning**

The objective of user guide is to pass the basic contents related with **ATS200**'s maintenance and smooth uses. User guide inclusive of text, images, logos, product name may not be distributed, modified, displayed, reproduced (in whole or in part) without the prior written permission of **ATID Co,.Ltd.** Furthermore, the described contents in this document are subject to change without notice for improving or maintaining the product and we inform the user that some material can be different with the described contents due to the firmware changes of product.

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## **Product Overview**

**ATS200** is an SLED-type barcode/RFID reader product. This product meets the basic performance of industrial products that can be used in waterproof/dustproof/dustproof and 1.5m drop tests above IP65 and can be used as data collectors in various fields, including medication management, inventory management, logistics delivery/tracking, production and access control.

This product can collect 1D/2D barcode and UHF RFID Tag information from one device. The collected data can be sent to the Host device via Bluetooth or USB transfer. SDK is supported for easy processing of collected data on host devices with Windows, Android, and iOS.

## **Key Features**

- 1) This product is an SLED type barcode/RFID reader.
- 2) It is a durable industrial product that meets IP65 and 1.5m drop standards.
- 3) Zebra (formerly Motorola)'s SE4710 barcode engine is adopted, enabling fast and accurate barcode data collection.
- 4) R2000 module from Impinj is built in, so UHF RFID Tag can be read-written.
- 5) Using a USB Type-C Cable, it can be connected to a PC and charged.
- 6) Even without a dedicated charging adapter, it can be charged using a regular smartphone charger.

## **Product Specification**

Perform	ance			
Processo	or	ARM7 Core		
Support	ed Platforms	Windows, Android, iOS (BLE Only)		
Internal	Storage	-		
Physical Characteristics				
Dimensi	ons (W x L x H)	76.1 x 173.7 x 139.8 mm		
Weight		420g (With Battery)		
Power		5,200mAh Lithium-Ion Battery (Rechargeable)		
Display		-		
USB Inte	rface	2 USB Port / Type-C		
Notificat	ion	LED Indicator, Buzzer, Vibrator		
Data Co	ollection			
	Protocol	EPC GEN2, ISO/IEC 18000-6C		
	Reading Range	~ 6m (Depending on environment and tag type)		
	Writing Range	~ 0.5m		
	RF Output	1W (MAX)		
RFID		US / FCC : 902MHz ~ 928MHz		
(UHF)		EU / CE : 865MHz ~ 868MHz		
	Frequency Range	KR / KC : 917MHz ~ 921MHz		
		JP / TELEC : 916MHz ~ 921MHz (1W)		
		: 916MHz ~ 924MHz (0.25W / Optional)		
	Antenna	Circular Antenna / 1dBi		
Barcode		2D Engine (Support to read 1D & 2D Barcode)		
Commu	unication			
Bluetooth		BT V2.1+EDR / BLE V4.1		
WLAN		-		
User Environment				
Operatir	ng Temp	-20°C to 50°C		
Storage	Temp	-30°C to 70°C		
Charging	g Temp	0°C to 45°C		
Humidity	y	5~95% (non-condensing, +25°C		
Drop Sp	ec	1.5m		
Sealing		IP65		

## **Configuration of the product**

#### 1. Name of each part

- 1 : Power Button
- 2 : Communication Mode Switch Button
- 3 : Reset Button
- 4 : Trigger
- 5 : Top Cover
- 6 : Barcode Scanner
- 7 : RFID Antenna
- 8 : Barcode / RFID Toggle Button
- 9 : Charging LED
- 10 : Barcode / RFID LED
- 11 : Communication Mode LED
- 12 : Hand Strap Connection Hole
- 13 : USB Port (Type-C)
- 14 : Gun Handle Release Button
- 15 : Gun Handle (Built-in Battery)
- 16 : Cradle Connection Terminal





## **Button Operation**

#### 1. Power On

- 1) Turn on the power by pressing the power button  $\bigcirc$  until the buzzer sounds.
- 2) If the communication mode LED blinks after the buzzer sounds, the power is on.



If the gun handle has been disassembled and reassembled, the instrument will not power on immediately when the power button is pressed. This is not a malfunction, but a procedure to check the battery status when first connecting the battery. In this case, if you hold down the power button longer than normal, it will power on normally.

#### 2. Power Off

- 1) If the power button is pressed while the power is on, the power is turned off.
- 2) If the communication mode LED turns off after the buzzer sounds, the power is off.

#### 3. Data Communication Mode Setting

- 1) Press the communication mode switch button sequentially switch between 'Bluetooth data communication mode' and 'USB data communication mode'.
- 2) It takes about 2~3 seconds to change data communication mode.

#### 4. Switch Barcode / RFID Function

Each time the Barcode/RFID toggle button is pressed, the 'Barcode', 'RFID', 'Trigger Input' mode is sequentially switched.



'Trigger input mode' is a mode in which the barcode or RFID reading function does not operate when a trigger signal is input and only the trigger signal is input to the host device.

## **Using Andorid Host Demo Application**

#### 1. Android Host – Bluetooth Connection

- 1) Install the Demo Application (Hereinafter : Demo App) included in the provided SDK.
  - In order to connect the Android Demo App and the device, the Bluetooth Data • Communication Mode of the device must be set to SPP mode.
  - Demo App for Android is available from Android version 4.2 Jelly Bean or later.
  - For the smooth operation of the app, it is recommended to use a device with Android • version 6.0 or higher.
- 2) Run the downloaded Demo App with the 3) Click 'Allow' on the next screen to activate the icon shown below.
- Bluetooth function of the host device.





4) Click 'New Device' from the menu that 5) Select 'BLUETOOTH' on the converted 'Regist appears when you click the <del>\_\_\_\_</del> icon in the upper right corner.

ATID Reader SE	=	ATID Reader SE	New Device
Registed Devices		Registed Devices	About

Device' screen and click the 'Scan Device' button.

Regist D	Regist Device				
BLUETOOTH	USB	BLE			
Paired Devices					
New Devices					
	SCAN DEVICE				

6) Connectable devices are displayed in 'New Devices'. If you click on the product, the device information is registered and you return to the previous screen.

Regist Device		ATID Reader SE	≡
BLUETOOTH USB	BLE	Registed Devices	
Paired Devices New Devices          New Devices         Maintoine         ATS100-6967         00.043E5469867		ATS100-6967 00043E54.0467	8
STOP			

6) Connectable devices are displayed in 'New 7) Touch and hold the licon of registered Devices'. If you click on the product, the device information.

ATS100-6967 DO043E5449467	negioree		-
	73	ATS100-6967 00:04:3E:54:69:67	8

- 8) Click the 'Connect' Button among the 9) When connected to the device normally, the activated menus.'Bluetooth connection request' window is
  - When connected to the device normally, the 'Bluetooth connection request' window is activated. Click 'Pair' to connect the **ATS200** to the host device.

register	d Devices		
17	ATS100-6967		8
		Connect	
		Delete	



#### 2. Android Host – Disconnect Bluetooth

1) While the ATS200 is connected to the host 2) Click 'Disconnect' in the activated menu to device, touch and hold the 👔 icon of the registered device on the 'Registered Devices' selection screen.

T ATS100-6967

disconnect the connection between the host device and the ATS200.

Registed	Devices		
1	ATS100-696 00:04:3E:54:69:67	7	*
		Disconnect	
		Delete	

#### 3. Android Host – Remove Bluetooth Connection Information

1) While the ATS200 is connected to the host 2 device, touch and hold the 👔 icon of the registered device on the 'Registered Devices' selection screen.

2)	Click 'Delete' in the activated menu to delete
	ATS200 device registration information.

Registed Devices	
ATS100-6967 000436546967	0





Even if the connected device is deleted from the app list, it is not removed from the Android device's Bluetooth connection list.

## SDK (Software Development Kit)

When the device operates in interactive mode, a separate program must be developed by referring to the SDK provided by ATID in order to utilize the data transmitted from the host device. ATID Bluetooth Reader SDK supports three platforms: Android, Windows, and iOS.

Platform	Development Tool	Development Language
Android	Andorid Studio	Java
Windows	Visual Studio	.NET Framework (C#), UWP (C#)
iOS	XCODE	Objective-C
SDK Package	Details	
Configuration		
Demo	Demo Application	
Doc	Development documents such as user guides / manuals,	
	programmer guides, demo guides, etc.	
Lib	Library for application development	
Sample	Sample Code	
USB Drive for Windows	ATID Bluetooth Reader의 Windosws USB Driver	



#### Each folder is composed of subfolders for each platform as shown below.



## **Product Warranty**

#### 1. ATS200 Product Details

For more information on product details ATS200, please visit the address below.

http://www.atid1.com

#### 2. SDK Download

If you need an ATS200 SDK, please contact us or the place of purchase.

#### 3. Warranty and Technical Support

All **ATID** products can be repaired free of charge for one year based on the product manufacturing date. However, in principle, any defects caused by customer carelessness in use shall be repaired even during the free repair period.

For warranty, technical support and inquiries on this product, please contact the distributor or ATID.

#### 4. Certifications

This product is KC, FCC, CE and TELEC certified, but we are not responsible for any issues arising during use outside of the certified area.

For details, please contact the distributor or ATID.

## ATID

Address : #1402, 83, Gasan Digital-1ro, Geumcheon-gu, Seoul, Republic of Korea (Zip code. 08589)

Phone : +82-2-544-1436

Fax : +82-2-859-0045

Homepage : www.atid1.com

Email : inquiry@atid1.com

The contents of the user manual are subject to change without notice for product specifications change or improvement.

# For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

#### This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two 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.

#### FCC CAUTION:

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### FCC NOTE:

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### Label Requirements

MODEL : ATS200 INPUT : 5V == 2A FCC ID : VUJ-ATS200 S / N : ATS220211001 WWW.atid1.com MADE IN KOREA

#### FCC RF Exposure Information and Statement

This device meets the government's requirements for exposure to radio waves. 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 or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged. Device types: UHF RFID Reader (FCC ID: VUJ-ATS200) has also been tested against this SAR limit. SAR information on this and other pad can be viewed on-line at http://www.fcc.gov/oet/ea/fccid/. Please use the device FCC ID number for search. This device was tested simulation typical 50 mm for RFID transmit to body. To maintain compliance with FCC RF exposure requirements, should maintain a separation distance between the user's bodies mentioned above