All that Identification

ATT739 USER GUIDE

ATID Co.,Ltd.
Ver 0.1

Contents

Introduction

ATT739 Tablets RFID Reader adopts excellent architecture design and powerful reading and writing algorithm. This device is equipped with Impinj E310 chip and has a strong multi-label reading ability, strong penetration ability, and a small misreading area. It is suitable for various desktop platform inventory checking occasions and various self-service settlement and cashier places. **ATT739** is suitable for clothing retail, warehousing logistics, library management and other fields, can effectively improve work efficiency and reduce operating costs.

Product Specification

Performance		
Processor		Cortex-M3
Supported Platforms		Windows
Physical Characteristics		
Dimensions (W x L x H)		300 mm x 300 mm x 20 mm
Weight		1.6 Kg
Power		5V / 2A
USB Interface		1 USB, USB Type-C Port
Notification		LED Indicator, Buzzer
Meterial		High-hardness aluminum profile outer frame Tempered Glass Panels
Data Collection		
RFID UHF	**Protocol**	EPC GEN2, ISO/IEC 18000-6C
	Reading Range	~ 2cm (Depending on environment and tag type)
	Writeing Range	~ 0.5m (Depending on environment and tag type)
	RF Output	1W / 30 dBm (Max)
	Reading Rate	Up to 400 times / second
	Frequency Range	US / FCC : 902.75 ~ 927.25MHz EU / CE : 865.7 ~ 867.5MHz JP / TELEC : 916.8 ~ 920.8MHz
User Environment		
Operating Temp		-20°C to 50°C
Storage Temp		-40°C to 70°C
Humidity		5~95% (non-condensing)

Reader Introduction

1. Instructions for Unpacking

After opening the package box, please check carefully whether the accessories are complete according to the Packing list of products. If there is any discrepancy or damage, please contact our company on time.

2. Overall structure composition

The **ATT739** tablets RFID Reader includes the RFID reader module, antenna, power supply and housing (high hardness aluminum frame, tempered glass panel).

3. External Dimension

Volume parameters of **ATT739** tablets RFID Reader is 330mm x 330mm x 20mm in metric system.

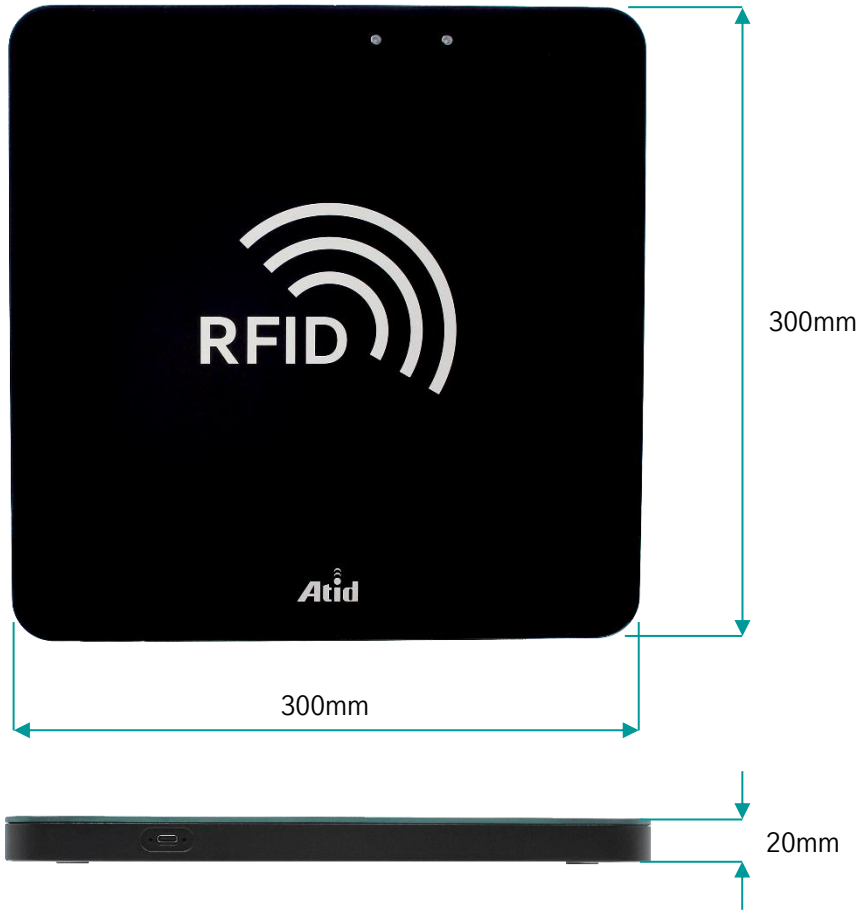

Figure 1. External Dimension Drawing

4. Weight

The net weight of **ATT739** tablets RFID Reader is about 1.6Kg (net weight of equipment) in metric system.

5. Interface Description

The following figure illustrates the communication interface on **ATT739** tablets RFID Reader, as shown in Figure 2.

Figure 2. Interface Diagram

USB Type-C interface is used communication with Host PC.

6. LED Indicators

The LED indicator of the **ATT739** tablets RFID Reader are used to indicate the status of the reader, which main include power status and working status, as shown in Figure 3.

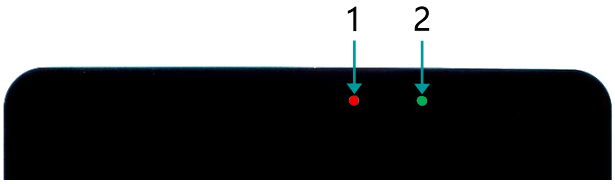

Figure 3. LED indicators

Detailed below :

1) **1** : Power status, when the red LED is lights up that the reader has been powered on.
2) **2** : Working status, when the green light is blinking that the reader is reading or has successfully read the RFID tag.

Installation of Reader and Reader Debugging

Before installing the **ATT739** tablets RFID Reader, check whether the following installation conditions are met.

1. Installation Conditions

After opening the package box, please check carefully whether the accessories are complete according to the Packing list of product. If there is any discrepancy or damage, please contact our company in time.

1) Meet the requirements of the working environment.
2) The required accessories are complete and meet the required standards and can constitute a complete read-write application environment.

2. Installation Step

Take out the USB communication cable from the packing box, USB Type-C connector is connected to the reader and USB Type-A connector is connected to the Host PC.

3. Power supply of Reader

1) **ATT739** can be operated simply by connecting a USB cable without a separate external power source.
2) When connecting a USB cable to the host device, **ATT739** is going to be powered-on.
3) Although the device can operate on a USB 2.0 port, it is recommended to connect it to a USB 3.0 port capable of supplying 5V / 2A to operate at maximum output.

4. Installations USB driver of Reader

Connecting the reader on Host PC at first time, users shall be to install USB driver on the following systems :

1) 32/64-bit Windows 11/10/8.1/8/7/VISTA/XP.
2) SERVER 2022/2019/2016/2012/2008/2003,2000/ME/98.

Windows 7 Professional requires patching.

5. Acceptance

The acceptance standards meet the following two conditions：

1) Inspection

- Confirm that the power plug of the reader is fixed firmly and not loosen.
- Confirm that the screws of USB Communication cable are fixed to the product panel.

2) Performance of Reader

- **Reading performance**

The default parameter of the reader can read 20 tags in 10 sec.

- **Reading range**

More usually, the default parameter of the reader had been read over than 50cm on the glass plane of the reader.

- **Misreading range**

Less than 40cm at glass plane nearby, less than 15cm under glass plane.

- **Suggestion**

In order to effectively verify the performance of the reader, we recommend shaking the label box to evaluate the stability and accuracy of the reader from different angles and positions.

Ensure that the reader can meet the actual application and enhance RFID reading rate, each reader performs above verification before shipping.

Reader Operation

1. Preparation and Inspection Before Use

Connection check : Make sure the power supply and USB are properly connected and that the reader is powered and communicating with the computer.

2. Status Description of Reader

Indicate LED : The red LED of power is lighted up and the system initialization is completed.

3. Demo App for Debug

Demo App Operation : Start the Demo software, select the corresponding **ATT739** model name and assigned com port, Click 'Connect' button. After successful connection, menu and buttons are activated, indicating that the reader has successfully communicated with the software. As shown in Figure 4. and Figure 5.

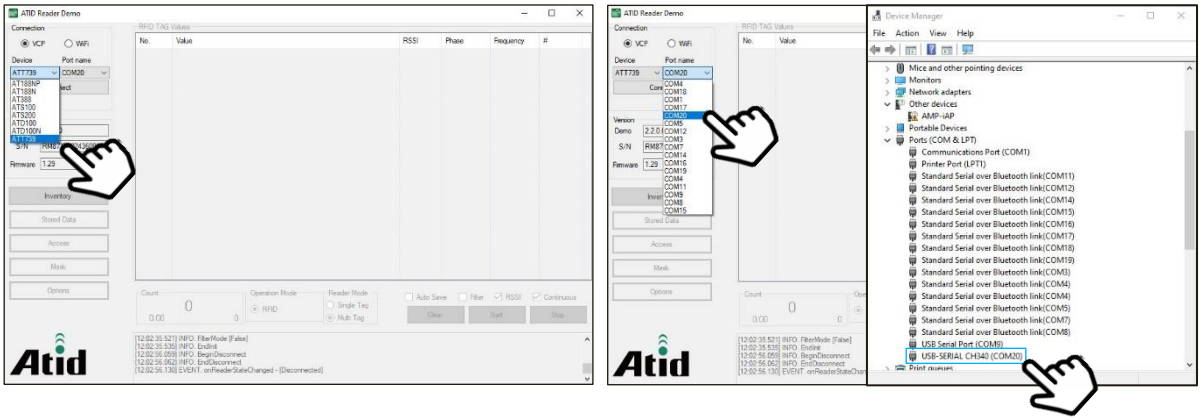

Figure 4. Model Selection and Com

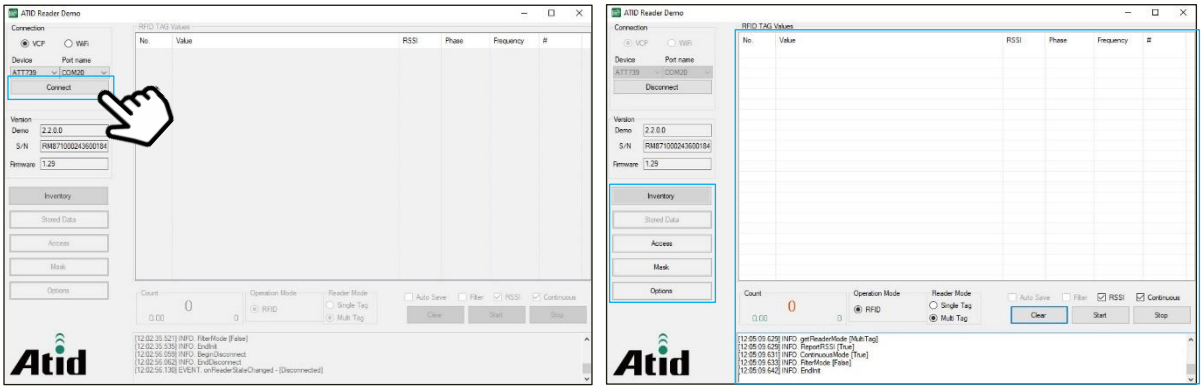

Figure 5. Connect Device

4. Tag Reading

Place the label on the glass panel of the reader and click the scanning button of the Demo App enable tag reading as shown in Figure 6. It is recommended to shake the label box when tag is reading for improving recognition rate.

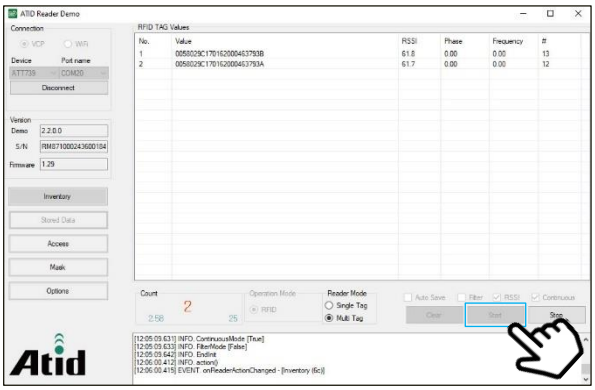

Figure 6. Tag Reading

5. RF Power Setting

Through the demo software, the user may set the RF power range in 1~30 dBm. Theoretically, the higher the RF output power, the farther the reading distance. First, to set up, click the 'Options' button to enter the Options Setting screen. Then, click the desired output value in the Power Gain menu to complete the setting. The operation steps are shown in Figure 7.

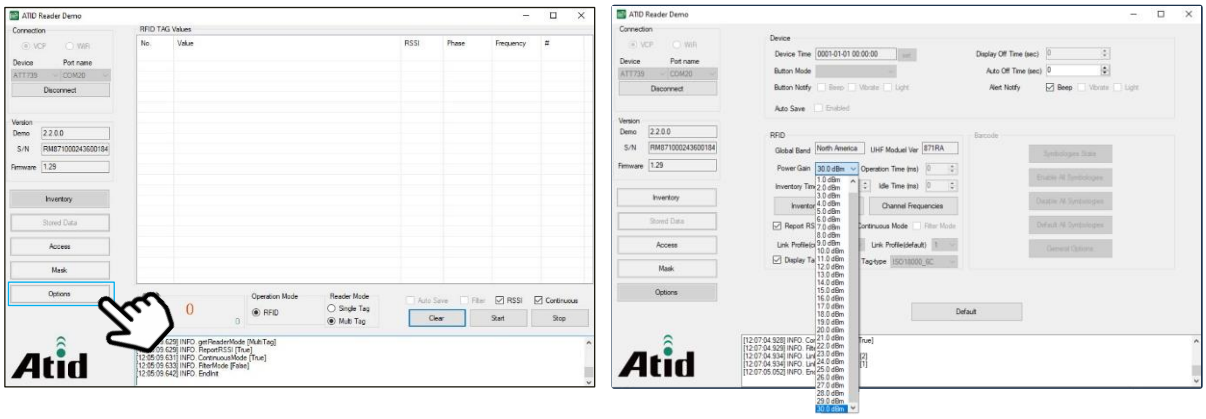

Figure 7. RF Output Power Setting

6. Reader Mode Setting

Reader modes can be selected according to actual needs to meet the requirements of tag reading in different scenarios.

1) **Single Tag :** Suitable for reading a small number of labels, faster response speed.

2) **Multi Tag :** Suitable for reading a large number of tags.

RF setting shall match the operation country / region and comply with local laws and regulations.

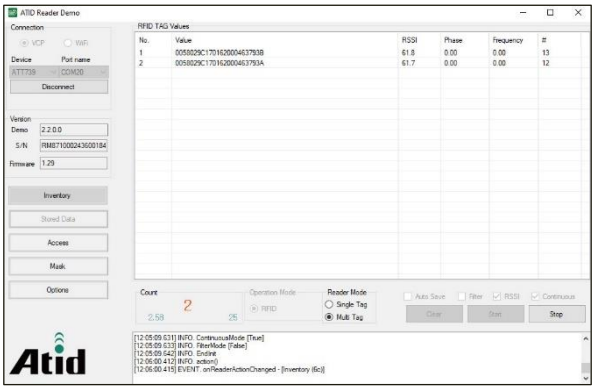

Figure 8. Reading Mode Setting

For more details, please refer to 'ATID Reader (ATT739) Demo Guide'.

SDK (Software Development Kit)

In order to utilize the data transmitted to the host device, a separate program must be developed referring to the SDK provided by **ATID**.

Platform	Development Tool	Development Language
Windows	Visual Studio	.NET Framework (C#), UWP (C#)
SDK Package Configuration	**Details**	
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	Windows USB Driver of ATID Reader	

Daily Maintenance

1. Maintenance Overhaul

The daily maintenance of the reader in the process of use mainly includes the following points：

1) Check the power cable connection of the reader to be secure.

2) Check the USB data cable connection of the reader to see if it is secure.

2. Common Fault Analysis and Solution

Users may encounter various kinds of faults in the process of using the reader. Here we list the common fault phenomena and treatment methods in combination with daily applications.

1) The power indicator light is not turned on： Check if the power supply is normal.

2) Communication cannot establish a connection

- Whether the USB driver is correctly installed.
- Whether the USB cable is damaged.
- Whether the serial port address is correctly identified and the corresponding serial port address is selected.

3) The reader cannot read the tag

- Check if the label is damaged.
- Check whether the label type (6c) is consistent with the software selection type.
- Check whether the label is placed within the effective read and write range of the reader.

4) The reader reads the tag at a close distance

- Check that the reader frequency setting is correct.
- Check the radio frequency output power of the reader and adjust the output power.
- To check whether the tag is a special tag, such as an anti-metal tag, the tag needs to be placed on the metal surface to achieve the best reading effect.

5) Slow label reading speed or poor multi-tag performance

- Check the performance of the label.
- Check that the 'Reader mode' selection in the RFID settings is correct.
- Check the radio frequency output power of the reader and adjust the output power.

For problems that cannot be solved by yourself, please contact the customer service center or technical support department.

3. Maintenance When Stored for a Long Time

If the reader is not used for a long time, please power off the reader, remove all cables, pack the reader and related accessories and store them in a relatively dry and well-ventilated place.

Product Warranty

1. ATT739 Product Details

For more information on product details **ATT739,** please visit the address below.

ATID Homepage

https://atid1.com/

2. 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 about this product, please contact the distributor or **ATID**.

3. Certifications

This product is FCC, CE, 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**.

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