

RFID reader writer
AMI2450-AT09/H
Users Manual

Ver1.00

ART Finex Co.,Ltd.

- About Attention receive matters

For regulations and standards

This product has built-in inductive read / write communication equipment.

Ask of the time of your use

The quality level of this product is limited to general applications (computer , OA equipment , FA equipment , communication equipment , measuring equipment , AV equipment, etc.) are limited to:

Applications related to human life (or example , medical equipment , space equipment , aircraft , what is required of the submarine relay equipment such as extremely high reliability) Please avoid use in:

If it is used in the specification in situations or environments not specifically noted or , transport equipment (train , car , ship , etc.) , such as control of , when you intend to use to those involved in the safety , rated , to function with your consideration get the safety measures , such as how to use or fail-safe with a margin for, thank you in advance for contacting our sales representative

In addition, with regard to quality by the circuit diagram described in this book , so you do not have to guarantee , please understand .

Ask of the time of your use

Provisions for product warranty of this product are as follows.

- ① The warranty period is one year from the product shipment

In addition, please forgive me for the responsibility of incidental damages resulting from the failure or malfunction of the body .

- ② If you fail in normal use state during the warranty period , please contact a sales representative so you do the repair and replacement free of charge .

- ③ Even within the warranty period , the following cases will demand a fee for repair or replacement.

1) Usage error, failure received from the other product

2) Move after the purchase , transport , fall , failure and damage due to contamination of the liquid / foreign body

3) Fire / earthquake / wind and flood damage / lightning / other natural disasters , pollution , smoke damage , failure or damage due to abnormal voltage

- ④ Even within the warranty period, in the following cases repair and replacement will be refused.

1) Failure and damage caused by improper repair / disassembly / remodeling

- ⑤ holding period of repair performance parts

In our company, after the end of production of the repair for the performance part of this product, we held three years as a general rule.

However, if you are unable to receive parts when they are difficult to obtain, please forgive us.

※ The performance parts are parts necessary to maintain the functionality of the product

- ⑥ Regardless of the presence or absence of the guarantee period , please return the product through the sales representative if you ask for repair. Repair exchange on-site

The specifications of the product

This product is for improvement , please understand that there is a possibility of change of without notice specifications .

Copyright

Software of this product , including the Convention on the copyright laws and , if the law on other intellectual property rights

- ① This product software reverse engineering , you will not be able to decompile or disassemble , .
- ② It is not possible to modify the whole or any part of the product of the software .

Precautions for Safe Use

This product has been designed with safety in full consideration .

However, all electrical products , and in the wrong hands , there is the danger that it that the injury occurs due to fire or electric shock . In order to prevent accidents

Please be sure to observe the following things .



Danger

(If the following items are ignored, and there is incorrect handling, there may be imminent risk of death or injury)


- flammable , explosive , please do not use in the environment of corrosive gas .
- this product , disassemble , do not repair and remodeling .
- Do not insert a finger or object in such a hole or gap .
- Do not use anything other than the predetermined power and voltage .



warning

(If the following items are ignored, and there is incorrect handling, there may be imminent risk of death or injury)

- When making the connection of the power supply to this product, Make sure that the power supply device is off.
- Do not touch the board of this product in the state in which the power is turned on.
- Do not disassemble or connect desorption of the product in the state in which the power is turned on.
- Do not stare at the light-emitting part of this product at close range .
- Do not damage the power cord connection code , break or process or , forcibly bend, pull , twist , or bundled , or place heavy objects , do not pinch .
- Do not place tatami , carpet ,or items such as a table cloth on top of the ones sensitive to heat .
- This product has a built-in communication device using radio waves . Depending on the application and place to be used for that purpose , it may affect medical equipment . In order to reduce this effect , we should take measures that do not close within 22cm from the mounting site of implantable shaped medical equipment this product .
- This product is communication equipment using the radio wave of 13.56MHz which is generally available in ISM band . Depending on the use and location where you want to use this , interference might occur. In order to minimize the effects of this interference, please pre- confirm upon introduction. In addition , there is also a fear that the radio astronomy and medical equipment , etc. , may be affected, so you should be especially careful about the use in such cases.
- When you connect this product , make sure that the polarity of the power supply connection terminal to the product is properly connected . If you connect the power supply to the wrong terminal , there is a risk of causing a failure of the circuit , burnout and firing .

 prohibition	(If the following matters are ignored, and there is incorrect handling , it may cause a malfunction)
<ul style="list-style-type: none"> ●Do not store or use at the location (environment) , such as the following . ●outdoors or in direct sunlight ●locations subject to vibration and shock ●moisture and dust in many places ●violent place or places where condensation occurs of location or temperature, and there is a humidity difference between high-temperature and high- humidity ●close to the ones generated by the heat (stove , heater , etc.) ●strong magnetic radio waves near the generation to those of (magnet , display , speaker , radio , radio , etc.) ●wet locations ●strong place of the influence of static electricity 	
<ul style="list-style-type: none"> ●When you connect this product , make sure that the polarity of the power supply connection terminal to the product is properly connected . 	
<ul style="list-style-type: none"> ●connector and screws attached to this product should be securely tightened. 	

Regulations and Standards

FCC CAUTION

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.

Properly shielded and grounded cables and connectors must be used for connection to host computers and / or peripherals in order to meet FCC emission limits.

Please use the enclosed USB cable with core. (Items listed below)

※USB cable :

Manufacture name : ELECOM Item name:USC-MF20BK (Or equivalent)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC ID : 2AM8PAMI2450-AT09H

1. Overview

This document describes the hardware specifications and the function outline of the RFID reader / writer "AMI2450-AT09/H".

AMI2450-AT09/H is an RFID reader / writer with a USB interface.

Since it is possible to operate the RFID reader / writer by autonomous control with the microcomputer function, control by dedicated command is unnecessary, so you can cooperate with the host device readily.

The installed RFID reader / writer is compatible with IC tags with I-CODE-SLI, I-CODE-SLIX chips conforming to ISO 15693, and scanning conditions can be set and registered in advance.

Keyboard emulation operation can be performed by software attached to this product, application software for data input on PC is unnecessary.

1-1. Feature

(1) Hardware

- ① It implements the USB interface.
- ② It incorporates a reader / writer compatible with ISO 15693, and it supports IC tags equipped with ISO 15693 compliant I-CODE-SLI and I-CODE-SLIX chips.

(2) Installed software

- ① Automatically read IC tag by autonomous control.
- ② Memory area for IC tag detection can be set / registered arbitrarily by dedicated tool.
- ③ The read information is automatically transmitted to the host device via USB.
- ④ Prefix data such as PLC commands can be inserted into the data to be output.
- ⑤ IC tag can be written by special tool.

(3) Attached software

The following Windows PC software is available.

- ① Setting tool that arbitrarily sets IC tag reading / output conditions.
- ② Keyboard emulation software that processes data received from AMI2450-AT09/H as keyboard input data.

2. Hardware Specifications

2-1. Body specification

No.	Item	Specification
1	Name of product	AMI2450-AT09/H
2	Communication system	ISO/IEC 15693、Felica(ISO/IEC18092)
3	Carrier frequency	13.56MHz±50ppm
4	Radio Law division	Inductive read / write communication equipment that has received the type designation
5	Host interface	Mini USB(USB2.0)
6	Power supply	5 Vdc (USB Bus power)
7	Consumption current	200mA or less
8	Operation temperature	0℃ ~ 50℃
9	Storage temperature	-20℃ ~ 70℃
10	Storage and operating humidity	30%RH ~ 90%RH(No condensation)
11	Housing size (D × W × H)	135mm × 76mm × 27mm (Fixed M4 tap for 4 places)
12	Weight	About 150 g or less
13	Dustproof and splashproof specification	No conformity standard

2-2. Body Photo

Mini USB port Power LED



(Front view)

Display LED
(2pcs)



(TOP view)



(Bottom view)