ART FINEX NEX5000SLCP RFID Reader/Writer with Security Function User Manual

ART FINEX NEX5000SLCP RFID Reader/Writer with Security

Function User Manual

**RFID reader writer
NEX5000S(LCP)
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 .

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 demanda fee for repair or replacement.

)Usage error, failure received from the other product

)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.

)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 .

(If the following items are ignored, and there is incorrect handling, there may be imminent risk of death or injury
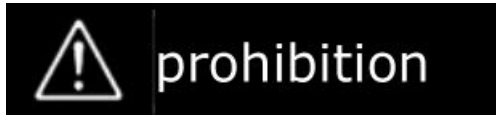
- flammable , explosive , please do not use in the environment of corrosive gas .
- this product , disassemble , do not repair and remodeling .
- Do not insert a finger or object in such a hole or gap .
- Do not use anything other than the predetermined power and voltage .

 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 .

 If the following matters are ignored, and there is incorrect handling , it may cause a malfunction

- 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
- When you connect this product , make sure that the polarity of the power supply connection terminal to the product is properly connected .
- 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.

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

FCC ID 2AM8PNEX5000SLCP

This device complies with below part 15 of the FCC Rules.
Part 15 Subpart C

The modular transmitter is only FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.
The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

Following information must be indicated on the host device of this module.

Contains Transmitter Module FCC ID: 2AM8PNEX5000SLCP

Since this module is not sold to general end users directly, there is no user manual of module.
For the details about this module, please refer to the specification sheet of module. This module should be installed in the host device according to the interface specification (installation procedure).

1. Overview
This document describes the hardware specifications and the function outline of the RFID reader / writer "NEX5000S(LCP)".

NEX5000S(LCP) is an RFID reader / writer with a UART interface.
NEX5000S (LCP) is an embedded module. When actually using it, it is necessary to prepare an interface board, control board, etc. separately. When using, cover the product with a resin case etc. so that your hands and fingers do not touch the product.

1-1 Feature
(1) Hardware
① It implements the UART interface.
②Compatible with IC tags equipped with Type A.

(2) Protocol
The control protocol from the upper host is upward compatible with our ASI4000 series, so you can use the application for the ASI4000 series.

(3) Security function
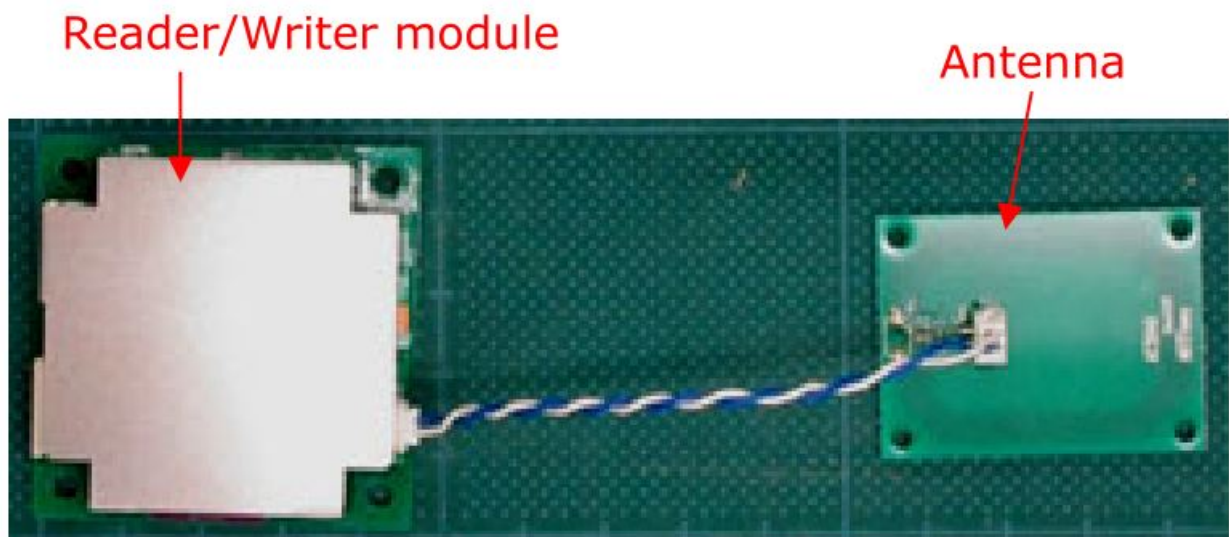A card with a corresponding security function can be used by installing a secure arithmetic module in the SAM slot.
MIFARE encrypted communication is possible when NXP SAM AV3 is installed.
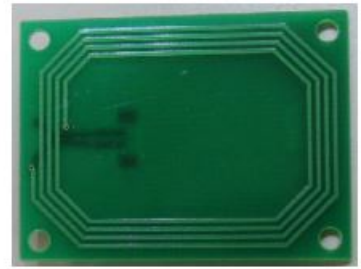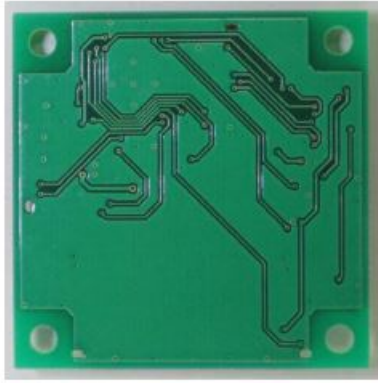
2.Hardware Specifications

2-1 Body specification

No.	Item	Specification
1	Name of product	NEX5000S(LCP)
2	Communication system	ISO/IEC 14443 TypeA
3	Carrier frequency	13.56MHz±50ppm
4	Radio Law division	Inductive read / write communication equipment that has received the type designation
5	Host interface	UART 9,600〜115,200bps　(Default : 38,400bps) data width 8bit, no parity, stop bit 1bit <table><tr><td>Pin</td><td>Use</td></tr><tr><td>1</td><td>Vcc(5.0V)</td></tr><tr><td>2</td><td>TxD</td></tr><tr><td>3</td><td>RxD</td></tr><tr><td>4</td><td>No connect</td></tr><tr><td>5</td><td>RESET</td></tr><tr><td>6</td><td>GND</td></tr></table>
6	Power supply	DC5.0V±0.25V
7	Consumption current	280mA or less
8	Operation temperature	-20℃ ～ 70℃
9	Storage temperature	-30℃ ～ 80℃
10	Storage and operating humidity	30%RI ～ 90%RH(No condensation)
11	Housing size 　(D × W × H)	Module:　　　47mm ×47mm ×5.5mm Antenna:　　　30mm ×40mm ×6mm
12	Cable length	90mm
13	Weight	About 20 g or less
14	Substrate coating	Manufacturer : ARBROWN HumiSeal : 1A27NSLU

2-2 Body Photo

(TOP view)

(Bottom view)

2-3.How to install

Use the holes at the four corners of the board to install the board with screws.
If there is a metal plate around the antenna board, the reading performance may be affected. Install the antenna board and the metal plate at a sufficient distance.

ART Finex Co., Ltd.

Contents

1 Documents /
Resources
2 Related Posts

Documents / Resources

ART FINEX NEX5000SLCP RFID Reader/Writer with Security Function [pdf] User Manual
NEX5000SLCP, 2AM8PNEX5000SLCP, NEX5000SLCP, RFID Reader with Security Function,
RFID Writer with Security Function