

Mobile/RFID Reader (IRD2M)

Installation Guide

Version 1.0.0

Safety instructions

Observe the following instructions to use the product safely and prevent any risk of injury or property damage.

Warning

Noncompliance of instructions could lead to serious injury or death.

Installation

Do not install the product in a place with direct sunlight, moisture, dust, or soot. A fire or electric shock may occur.

Do not install the product in a place with heat from an electric heater. A fire or electric shock may occur due to overheating.

Install the product in a dry place. Otherwise, a product damage or electric shock may occur due to moisture.

The user should not install or repair the product independently. If the product has been damaged due to independent installation or repair of the product by the user, free A/S service will not be provided.

Caution

Noncompliance of instructions could lead to minor injury or product damage.

Operation

Do not allow liquids such as water, beverages, or chemicals get into the product. A fire, electric shock, or product damage may occur.

Installation

Do not install the power supply cable in a place where people pass by. Product damage or physical injury may occur.

Do not install the product near a highly magnetic object such as a magnet, TV, (especially CRT) monitor, or speaker. A product failure may occur.

If installing the product outside where the product is completely exposed, it is recommended to install the product together with the enclosure.

Keep the minimum separation distances between the devices when install multiple devices. Otherwise, RF performance is affected to the other device, the devices may not operate normally

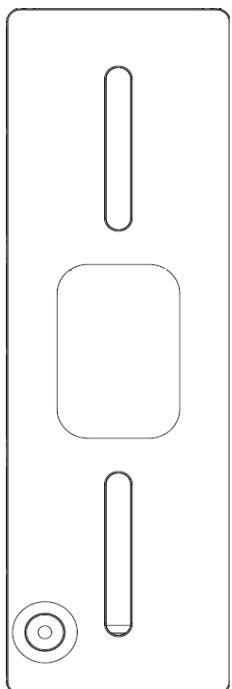
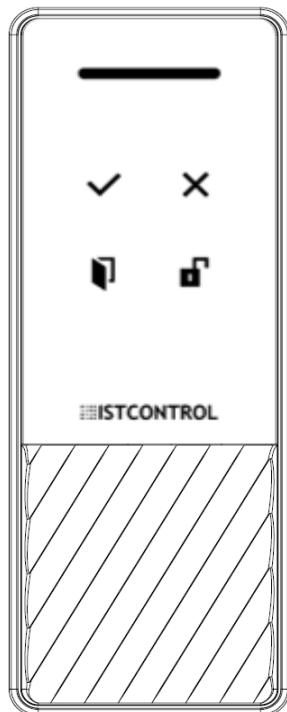
- Components

IRD2M reader 1 ea Wall mount bracket

1 ea

Wall fixing screw 2 ea

Bracket fixing screw 1ea



- IRD2M Reader

- Wall mount bracket

- Wall fixing screw

- Bracket fixing screw

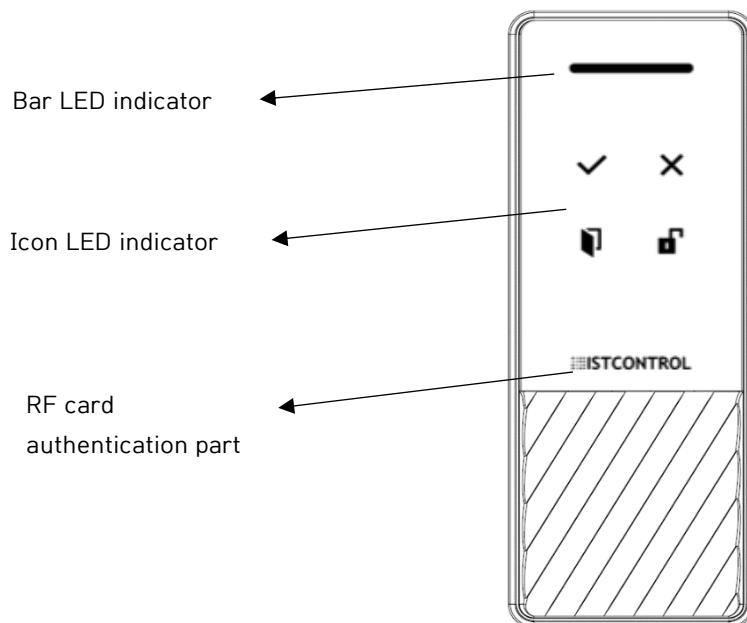
- **Specification**

IRD2M reader supports RFID protocol of 13.56Mhz RFID : ISO/IEC 15693, ISO/IEC 14443 A/MIFARE , ISO/IEC 14443 B , Felica, ISO/IEC 18092(NFC IP-1) and Bluetooth and NFC protocol for mobile communication.

- Mobile ID (Bluetooth, NFC) reading
- Mobile ID Manger App (Reader setting app) communication
- ISO 14443 A/B, ISO 15693 RFID card reading
- 26, 32, 34, 37 bit Wiegand data output
- ICON LED indicator of 4 external input signal (ex. access granted, access denied, door open, door locked)
- 3 Color LED indicator (RED, GREEN, BLUE)
- Buzzer Control
- Tamper Alarm
- External input signal output in wiegand

Base Part Number	Input Voltage (VDC)	Current			Operation Temperature	Cable Length
		Standby AVG	Max AVG	Peak		
IRD2M	12V	250mA	300mA	400mA	-20°C ~50°C	Wiegand : 22 AWG (150m) 24 AWG (90m) RS-485 : 4 AWG (1,200m) 24 AWG (500m)

- **Name and function**



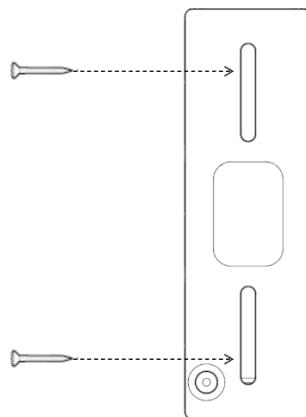
IRD2M slim type reader

- Connection

PIN		English	한국어
		Color	색상
1	PWR +VDC	Red	빨간색
2	PWR GND	Black	검은색
3	WG DO	Green	초록색
4	WGD1	White	흰색
5	485 TRXA	Yellow(Gray Stripe)	노란색 (회색띠)
6	485 TRXB	White (Gray stripe)	흰색 (회색띠)
7	RED LED	Brown	갈색
8	GRN LED	Orange	주황색
9	BUZZER	Yellow	노란색
10	TAMPER	Violet	보라색
11	EXT IN1	SKY	하늘색 
12	EXT IN2	Blue	파랑색 
13	EXT IN3	Pink	분홍색 
14	EXT IN4	Gray	회색 

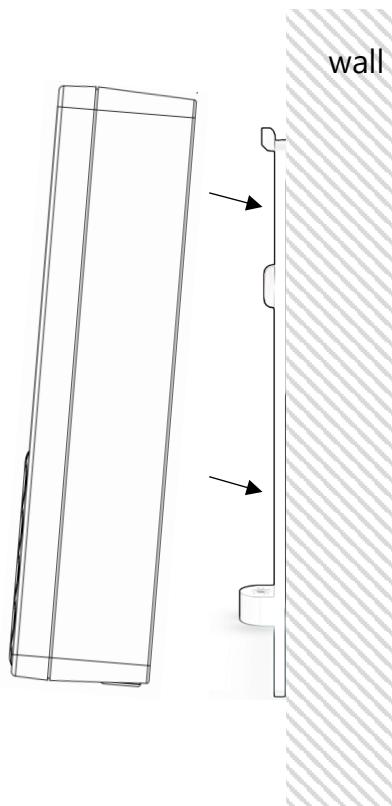
- **Installation**

1. Select a proper place to install and put the wall mount bracket. Fix the bracket with wall fixing screw. Try to keep minimum distance of 500mm between readers.



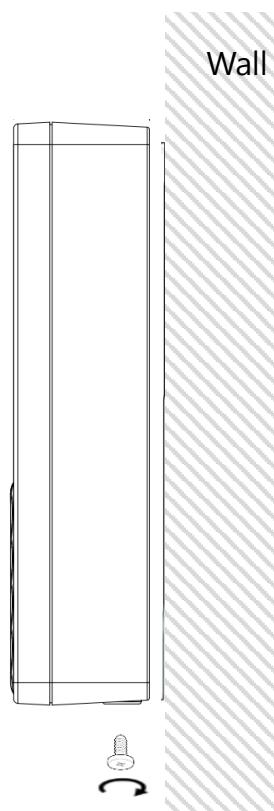
IRD2M slim type reader

2. Make wire connections referring connection table.
3. Put the reader on the bracket fixed on the wall.



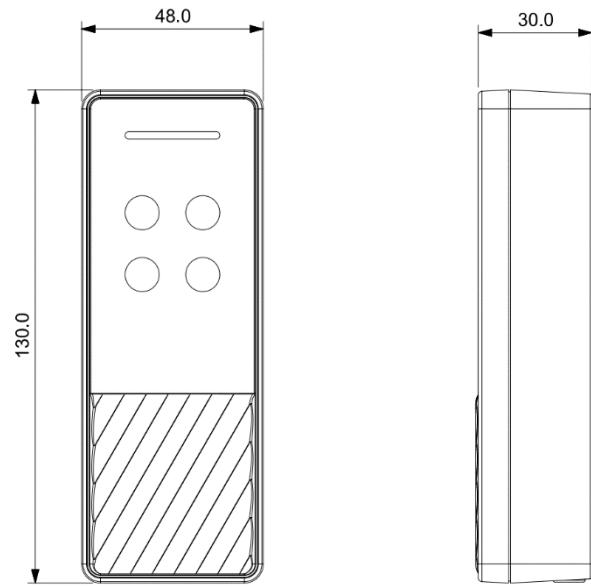
IRD2M slim type reader

4. Fix the reader to the bracket with bracket screw



IRD2M slim type reader

- **Dimension**



FCC Interference Statement

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 compliance information**FCC Compliance Statement**

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.

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. Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC ID : 2AZS5IRD2M

EU Declaration of Conformity (CE)

This product is CE marked according to the provisions of the Radio Equipment Directive (RED) 2014/53/EU. Hereby, ISTCONTROL declares that this product is in compliance with the essential requirements and other relevant provisions of Radio Equipment

Directive (RED) 2014/53/EU.

- Bluetooth Transmit Power: 8.65 dBm
- Bluetooth Frequency: 2402~2480 MHz
- NFC Frequency: 13.56 MHz
- RFID Frequency: 13.56 MHz



AT	BE	BG	CH	CY	CZ	DE	DK
EE	EL	ES	FI	FR	HR	HU	IE
IS	IT	LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI	SK	

This device meet the EU requirements on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

For more information, contact us at the following contact information.

ISTCONTROL, Inc.

Access Control & Integrated Solution Provider

1203, 37, Maebongsan-ro, Mapo-gu, Seoul, Republic of Korea 03909

TEL: 82+ 070-4194-1993

[Website : www.istcontrol.com](http://www.istcontrol.com)

Email: info@istcontrol.com

Declaration of Conformity

Manufacturer Name:	ISTCONTROL CO., LTD.
Manufacturer Address:	#1203, 12F, 37, Maebongsan-ro, Mapo-gu, Seoul, Republic of Korea
Importer Name*: (Or authorized representative): *If manufacturer is not in EU	Under Article 10(2) and 10(10), there are no restrictions of use
Importer Address:	-

Declare under our sole responsibility that the product

Product Type/Description:	Smart RFID Card Reader
Model:	IRD2M
Variant Model:	-
Trade Name:	ISTCONTROL Co., Ltd
Product Identification Element:	IRD2M
Product Accessories (if applicable):	N/A
Hardware version	V1.01
Software version	V2.00

Is in conformity with the following standards or other normative documents

Test standards

Radio: ETSI EN 300 328 V2.2.2(2019-07), ETSI EN 300 330 V2.1.1(2017-02)

EMC : ETSI EN 301 489-1 V2.2.3(2019-11), ETSI EN 301 489-3 V2.1.1(2019-03),

ETSI EN 301 489-17 V3.1.1(2017-02)

Safety : EN IEC 62368-1:2020+A11:2020

Health : EN 62311:2008

We hereby declare that [all essential radio test suites have been carried out and that] the above named product is in conformity to all the essential requirement of Directive 2014/53/EU.

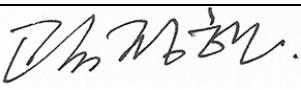
The conformity assessment procedure referred to in Article 17 and detailed in Annex [III] of Directive 2014/53/EU has been followed with the involvement of the following Notified Body(ies):

PHOENIX TESTLAB GmbH (Notified Body Number: 0700)

Königswinkel 10 D-32825 Blomberg Germany

EU-Type Examination Certificate No.:

The Technical documentation relevant to the above equipment will be held at

Name :	Kwak Jung Hyun
Title :	President
Address:	1230, 37, Maebongsan-ro Mapo-gu, Seoul, Republic of Korea
Date: November 2, 2021	 Signature of Authorized person