

● Introduction

This is designed in accordance with Felica ISO 18092(UID) & Mifare ISO 14443A(UID) standard to read the contact less smart card. It is easy to use as Mifare card reader via Wiegand 26/34 bits / UART(TTL) / RS-232 interface communicated with PC. It is designed for low cost and high security as well as convenience and reliability.



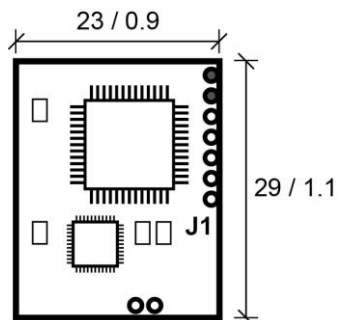
● Features

- SDK simplifies various RFID product developments.
- High data integrity.
- Felica ISO 18092(UID) & Mifare ISO 14443A(UID)
- High speed data transfer.
- Supply flexible ODM/OEM.

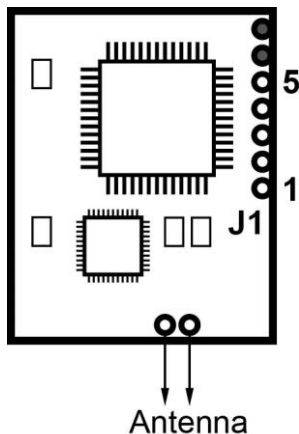
● Specification











| | |
|---------------------------------|---|
| RFID frequency | 13.56MHz |
| Applicable cards | Mifare S50 / S70, Ultra Light, Felica or compatible |
| Reading range | Depending on tag size, tag type and antenna size |
| Output format | Wiegand 26/34 bits / UART(TTL) / RS-232 (9,600 bps N, 8, 1) |
| Power input | 5V±10% |
| Standby / Operating current | 65mA ±10%@ 5V DC / 65mA ±10%@ 5V DC |
| Dimensions(L) x(W) x(H) mm/inch | 23 x 29 / 0.9 x 1.1 |
| Operating temperature | -10°C ~70°C |
| Storage temperature | -20°C ~85°C |

● Dimension: Unit: mm/inch



- **Wire configuration**



| J1 | | | | |
|-----|---|---------------|--|---------------|
| Pin | Signal direction input/output | Output format | Signal direction input/output | Output format |
| | | RS-232 / TTL | | Wiegand |
| 5 |  | +5V |  | +5V |
| 4 |  | GND |  | GND |
| 3 |  | NC |  | NC |
| 2 |  | RS-232/Tx |  | D0 |
| 1 |  | NC |  | D1 |

- **Data formats**

UART output format

| | | | | |
|------------|-------------------|----|----|------------|
| STX(02Hex) | CARD ID(10 ASCII) | CR | LF | ETX(03Hex) |
|------------|-------------------|----|----|------------|

If the card no. is **18000D7E90**, you will get the following Hex value.

STX ETX
Hex value : 02H, 31H, 38H, 30H, 30H, 30H, 44H, 37H, 45H, 39H, 30H, 03H

Transmission Spec.

Baud rate : 9,600 bps
Parity bit : none
Data bit : 8
Stop bit : 1

Wiegand 26 bits output format

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|----|----|----|----|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| P | E | E | E | E | E | E | E | E | E | E | E | E | O | O | O | O | O | O | O | O | O | O | O | O | P |
| Summed for even parity(E) | | | | | | | | | | | | | Summed for Odd parity(O) | | | | | | | | | | | | |

P=Starts Even parity bit and stop Odd parity bit.

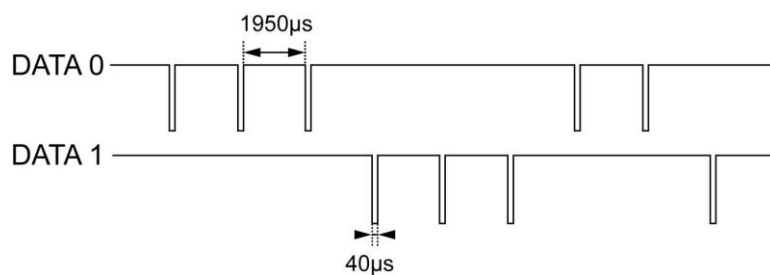
Even parity "E" is generated by summing from bit2 to bit13; Odd parity "O" is generated by summing from bit14 to bit25.

Wiegand 34 bits output format

[illegible]

P=Starts Even parity bit and stop Odd parity bit.

Even parity "E" is generated by summing from bit2 to bit17; Odd parity "O" is generated by summing from bit18 to bit33.



● Application field



● Ordering information

| | |
|----------------------|--|
| PXFC-13SN/W26 | : RFID 13.56MHz Felica / Mifare Module(UID), Wiegand 26 bits |
| PXFC-13SN/W34 | : RFID 13.56MHz Felica / Mifare Module(UID), Wiegand 34 bits |
| PXFC-13SN/T | : RFID 13.56MHz Felica / Mifare Module(UID), UART(TTL) |
| PXFC-13SN/R2 | : RFID 13.56MHz Felica / Mifare Module(UID), RS-232 |

● Packing list

User manual X1

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Specifications subject to change without notice for further modification.