



PXFC-01SN

RFID 13.56MHz Felica / Mifare Module(UID)

User Manual

Ver.18.1

● 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 / TTL / RS-232 interface communicated with PC. It is designed for low cost and high security as well as convenience and reliability.



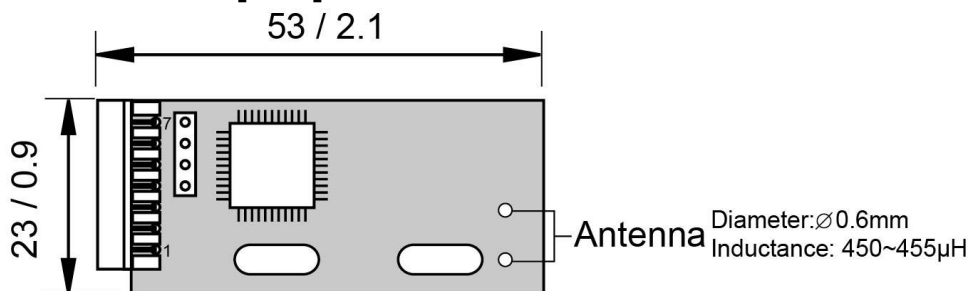
● Features

- 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.

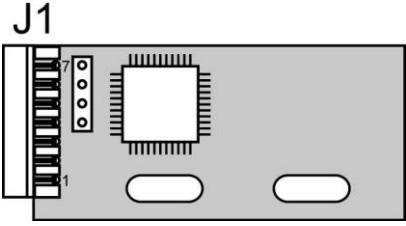
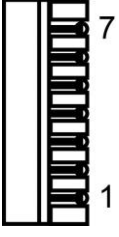
● Specification

RFID frequency	13.56MHz
Applicable cards	Mifare S50 / S70, Felica
Reading range	Depending on tag size, tag type and antenna size
Output format	Wiegand 26/34 bits / TTL / RS-232 (9,600 bps N, 8, 1)(optional)
Power input	5V±10%
Standby current	75mA ±10% @ 5V DC
Operating current	98mA ±10% @ 5V DC (Depending on antenna size)
Dimensions(L) x(W) x(H) mm/inch	53 x 23 / 2.1 x 0.9
Operating temperature	-10°C ~70°C
Storage temperature	-20°C ~85°C

● Dimension: Unit:mm[inch]



- **Wire configuration**

					
J1 – 7 pin connector					
	Pin	Color	Signal direction input/output	Output format	
				RS-232/TTL	Wiegand
	1	Red	←	+5VDC	+5VDC
	2	Black	—	Ground	Ground
	3	Orange	→	TX	---
	4	Purple	→	RX	---
	5	Black	—	---	Data 0
	6	Gray	—	---	Data 1
	7	Gray	—	---	---

- **Data formats**

UART output format

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

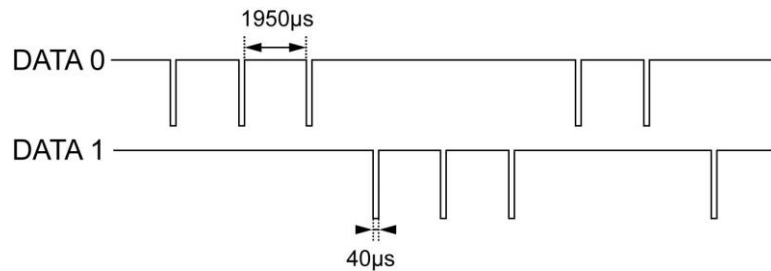
Even parity “E” is generated by summing from bit2 to bit13; Odd parity “O” is generated by summing from bit14 to bit25.

Wiegand 34 bits output format

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	27	28	29	30	31	32	33	34
P	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P
P	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																	
																	O	O	O	O	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 bit17; Odd parity "O" is generated by summing from bit18 to bit33.



● Optional antenna

Antenna Model No.	Dimension	Reading Range (Depending on tag size, tag type)
R-17-PP87/1.2UH-COIL	68 x 96MM	5CM
R-17-PUA310M2/COIL	69.5 x 58.5MM	6CM
R-17-PP3702/M COIL	79 x 103MM	7CM
R-17-PM6750/COIL	65.5 x 51.3MM	4.5CM
R-17-PZ85/COIL/M	78 x 53MM	3CM
R-17-PP110M2/COIL	81 x 33MM	3CM

● Ordering information

PXFC-01SN/W26	: RFID 13.56MHz Felica / Mifare Module(UID), Wiegand 26 bits
PXFC-01SN/W34	: RFID 13.56MHz Felica / Mifare Module(UID), Wiegand 34 bits
PXFC-01SN/T	: RFID 13.56MHz Felica / Mifare Module(UID), TTL
PXFC-01SN/R2	: RFID 13.56MHz Felica / Mifare Module(UID), RS-232

● Packing list

User manual X1
7 Pin connector X 1

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Specifications subject to change without notice for further modification.