RFID 125KHz Dual Decoding Read Module
RFID 125KHz ASK/FSK Read Module
PIEH- SYN

Ver.18.1

● **Introduction**

The 125KHz proximity reading module equipped with the **ASK / FSK** dual decoding circuits to read the both EM & H.I.D. cards or tags into UART formats. In this version, we output the UART signal by external jumper selection.
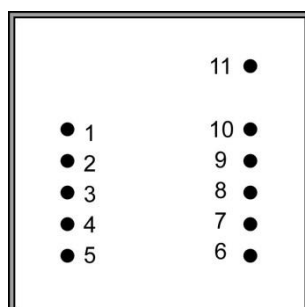
● **Features**

● 125KHz proximity dual decoding technologies reading for EM, TEMIC, H.I.D. cards at the same mode.

● Embedded with internal antenna or external bigger antenna at the same model.

● Epoxy potted for weather resistant with reliable quality.

● Compact size with high performance.

● Ease system design for access control, fingerprint, mobile handheld device etc.

● **Specification**

Type	EM	H.I.D.
Card	EM 4001,EM 4102 or compatible / TEMIC 5557	H.I.D., TEMIC 5557
Operation frequency	125KHz, ASK	125KHz, FSK
Output format	UART(9,600 bps , 8, N, 1)	
Power requirements	5VDC @ 30mA nominal	
Operating temperature	-10℃ ~ 75℃	
Storage temperature	-20℃ ~ 85℃	

● **Bottom view**

● Pin assignments

Pin No.	Description	ASCII
Pin 1	Zero Volts and Tuning Capacitor Ground	GND 0V
Pin 2	Reset	Strap to GND
Pin 3	To External Antenna and Tuning Capacitor	Antenna
Pin 4	To External Antenna	Antenna
Pin 5	Card Present output	Card loading
Pin 6	Future	Future
Pin 7	Format Selector(+/-)	Strap to GND
Pin 8	Data 1	UART
Pin 9	Data 0	Complementary output
Pin 10	3.1 kHz Logic	Beeper/LED
Pin 11	DC Voltage Supply	+5V

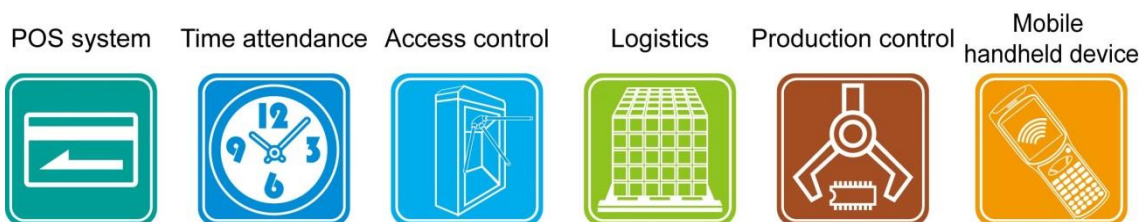※Complementary & TTL in ASCII output could support differential RS-485 interface.

● Data formats

UART output format

STX(02Hex)	CARD ID(10 ASCII)	CHECK SUM(2 ASCII)	CR	LF	ETX(03Hex)

The 1 byte (2 ASCII characters) Check sum is the "Exclusive OR" of the 5 hex bytes(10 ASCII)Data characters.

● Application fields

POS system   Time attendance   Access control   Logistics   Production control   Mobile handheld device

Specifications subject to change without notice for further modification.