



PROXIMITY MODULE (With antenna)

PIEM-EWS-12V

Ver.12.1

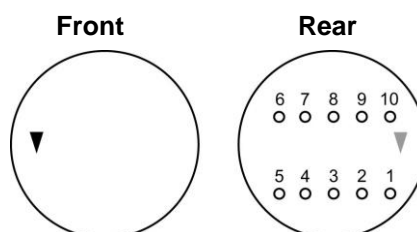
● FEATURES:

- 1.AM 125KHz contactless proximity reading module specially for EM cards,
- 2.Either Wiegand 26 or ASCII output determined by pin assignment
- 3.Read only for EM cards, and the data are sent by Data 0 and Data 1.
- 4.Lower cost with effective performance
- 5.Compact size
6. Including antenna

● SPECIFICATION:

Dimensions	26 (W) x 9 (H) mm
Transmitting Frequency	AM 125 KHz
Power Consumption	25 mA(5~12V) nominal (with coil)
I/O	25mA sink/source
Operating Temperature	0°C ~ 60°C
Storage Temperature	0°C ~ 60°C
Storage Humidity	5~95% RH
Net Weight	9.2g±5%

● Dimensions:



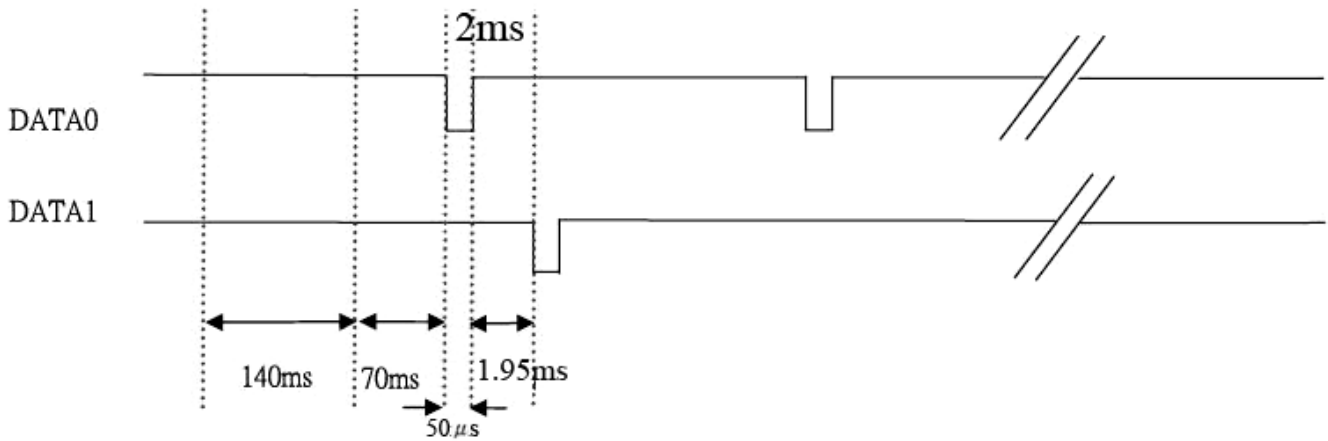
● PIN ASSIGNMENTS:

PIN	NAME	I/O	SYMBLE	MIN	TYP	MAX	DESCRIPTION
1	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---
3	DATA1	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Digital data output
4	DATA0	O	Vo-H Vo-L	Vcc-0.2V -	Vcc GND	Vcc+0.2V Vss+0.2V	Digital data output
5	WRITE	I					Low active
6	ASCII / WIEGAND	I					HI:ASCII DEFAULT:Wiegand26
7	GLED	O	Vo-H Vo-L	Vcc-0.2V-	Vcc GND	Vcc+0.2V Vss+0.2V	High active
8	RLED	O	Vo-H Vo-L	Vcc-0.2V-	Vcc GND	Vcc+0.2V Vss+0.2V	Low active
9	VCC		Vcc	4.5V	5~12V	12.5V	VCC
10	GND						Ground

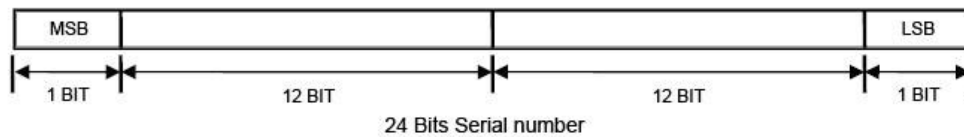
● Connectivity Diagram: Weigand Output.

The bits period for D0& D1 is 730μs.
D0 & D1signal BIT LOW PULSE is about 35μs.

1. Time period flow chart



2.Data output format



● Connectivity Diagram: RS232C(ASCII) Output.

1. Data output format
 - a. 9600bps, N, 8, 1
 - b. PIN3:TX non-reverse output
 - c. PIN4:TXreverse output
 - d. CHECKSUM: Using card 10 bytes DATA for XOR calculation

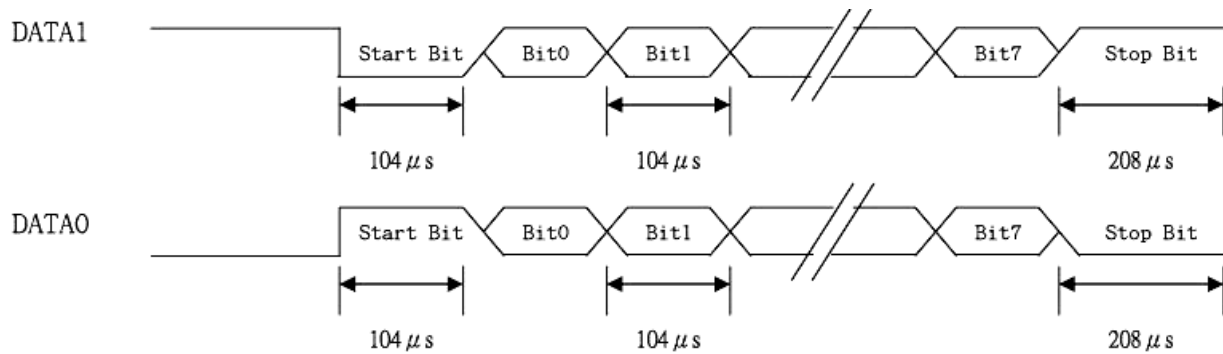
02	10 ASCII Data Characters	Checksum	03
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For example: card number : 62E3086CED

ASCII with check sum :36H, 32H, 45H, 33H, 30H, 38H, 36H, 43H, 45H, 44H

Check sum algorism :62(H) XOR (E3H) XOR (08H) XOR (6CH) XOR (EDH)=08H

2. Time period flow chart



● Application Wiring:

