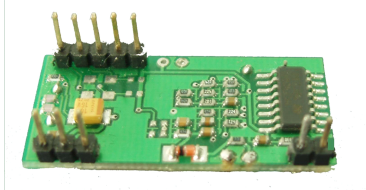


## RDM630 Proximity Reader Module

### DATA SHEET

#### Proximity Reader Modules

#### Operational and Physical Characteristics

Parameters	Description	Photo
Read Range	8-12cm	
Dimensions	38.5mm(L)x18.5mm(H)x8.5mm(W)	
Frequency	125kHz	
Card Format	uEM 4100 or compatible	
Encoding	Manchester 64-bit, modules 64	
Power Requirement	5VDC @ 35mA nominal	
Voltage Supply Range	+4.6V through +5.4VDC	

#### Pin Out

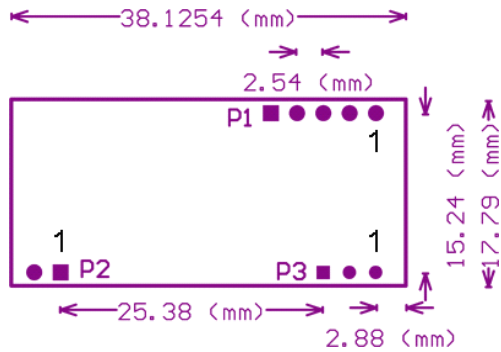


Figure1

#### Pin Description & Output Data Formats

PinNo.	Description	630RDMT (ASCII)	RDM630W(Wiegand)
Pin 1.1	NC	NC	NC
Pin 1.2	D1	NC	DATA0 Output
Pin1. 3	D0	TTL Data Output(Tx)	DATA1 Output
Pin1. 4	GND	GND	
Pin1. 5	VCC	POWER(+4.6V - +5.4V DC)	
Pin 2.1	ANT1	To Antenna (L1=475uH)	
Pin 2.1	ANT2	To Antenna	
Pin 3.1	LED/BEEP		
Pin3.2	VCC	POWER(+4.6V - +5.4VDC)	
Pin3.3	GND		

\*Pin3. 3 is PEEPER/LED Driver, after Data output , Pin3.3 is set low

\*RDM630W1 = Wiegand26

RDM630W2 = Wiegand26/34 Switch

RDM630W3 = Wiegand34

### Data Formats

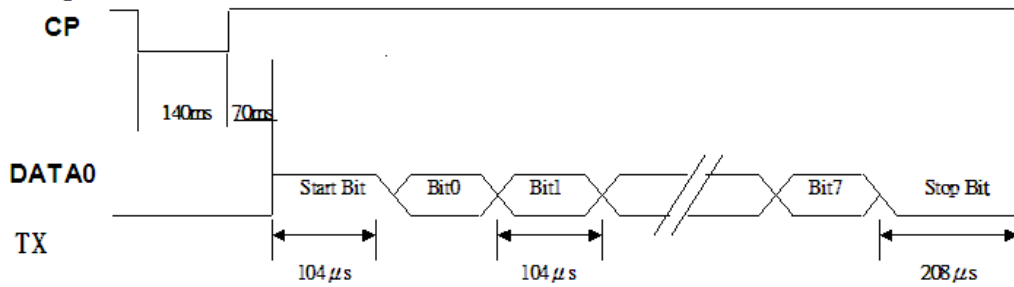
**RDM630T** Output Data Structure– ASCII(RS232.TTL) 9600bps,N,8,1

STX (02H)	DATA(10 ASCII)	LRC (2 ASCII)	ETX (03H)
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[The 1byte (2 ASCII characters) , LCR is the Longitudinal Redundancy Check.]

**For Example:** DATA : 62H E3H 08H 6CH EDH, LRC: (62H) XOR (E3H) XOR (08H) XOR (6CH) XOR (EDH)=08H, Output:  
 0X02 0X36 0X32 0X45 0X33 0X30 0X38 0X36 0X43 0X45 0X44 0X30 0X38 0X03

### Timing chat



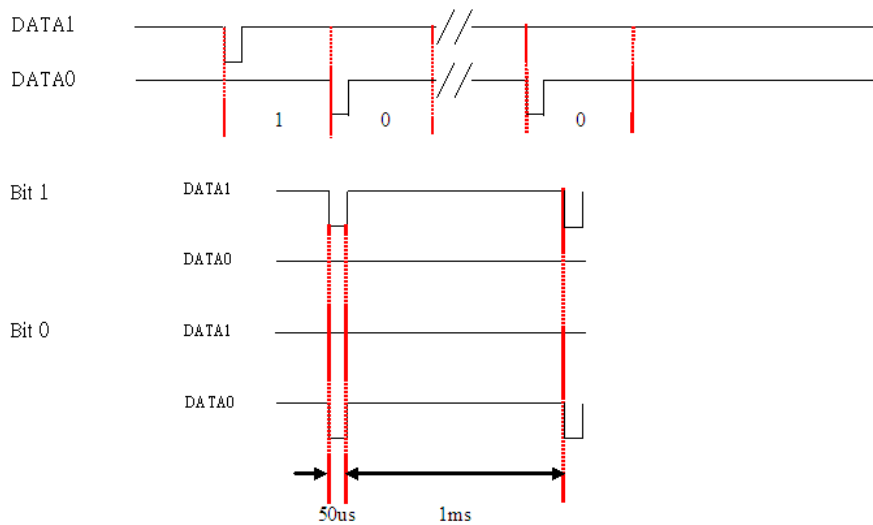
**RDM630W1** Output Data Structure, For Exaple: Wiegand 26 bit

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(1)	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	P(2)
EVEN Parity(E)													ODD Parity(O)													

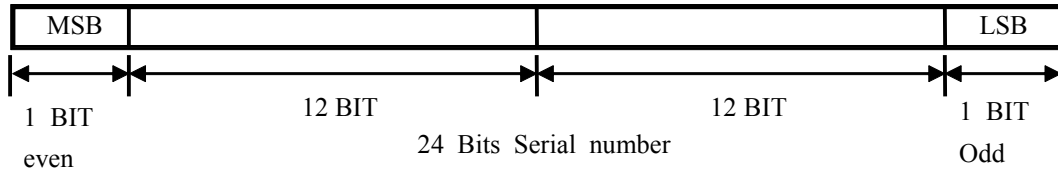
P(1):Parity Start Bit, 2-13 bit EVEN Parity bit

P(2):Parity Stop Bit, 14-26 bit ODD Parity bit

Weigand :



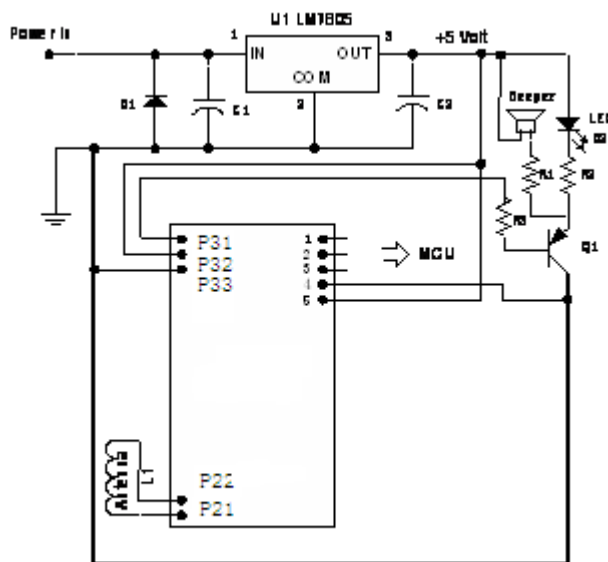
Data format



**NOTE**

- 1: MSB send first
- 2: MSB first 12Bits a even check bit , LSB 12 Bit an Odd check bit.

**Circuit Diagram for the RDM630 Module**



**COMPONENT LIST**

- R1=100Ω
- R2=1K
- R3=1K
- C1=100uF/16V
- C2=100uF/10V
- D1=1N4001
- D2=LED
- U1=LM7805
- Q1=UTC8550 (PNP)
- L1=475-575uH

**Figure2**