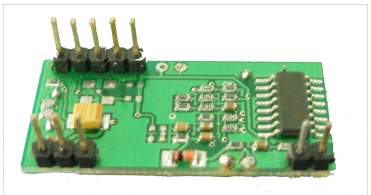
RDM630 Proximity Reader Module

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

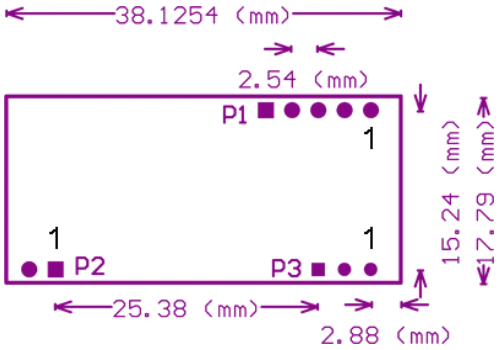


Figure1

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

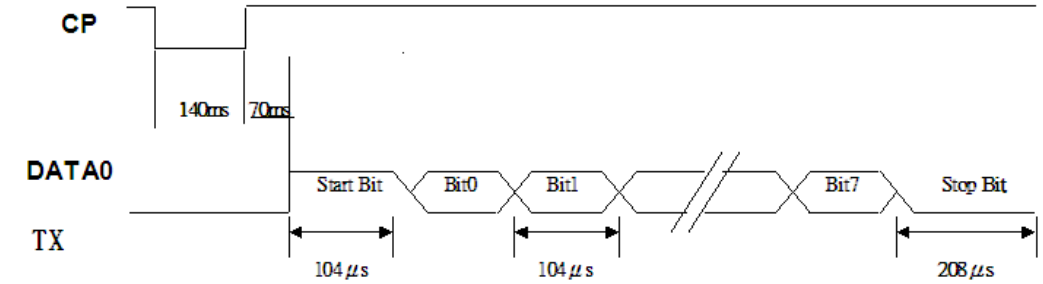
STX (02H)	DATA(10 ASCII)	LRC (2 ASCII)	ETX (03H)

[The 1byte (2 ASCII charaters) , 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



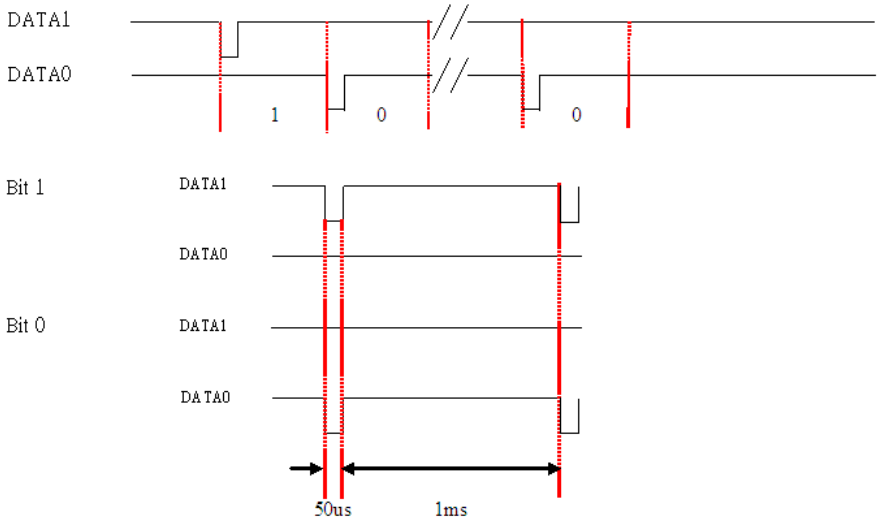
RDM630W1 Output Data Structure，For Exaple: Wiegand 26 bit

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

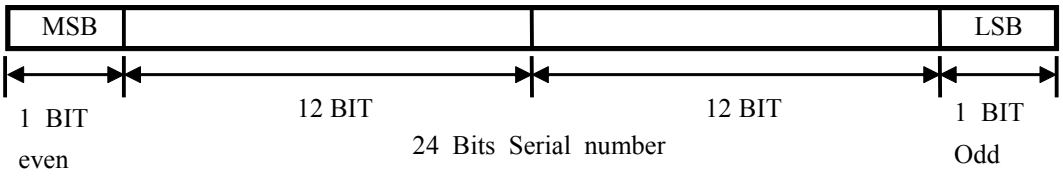
P(1):Parity Start Bit, 2-13 bit EVEN Parity bit

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

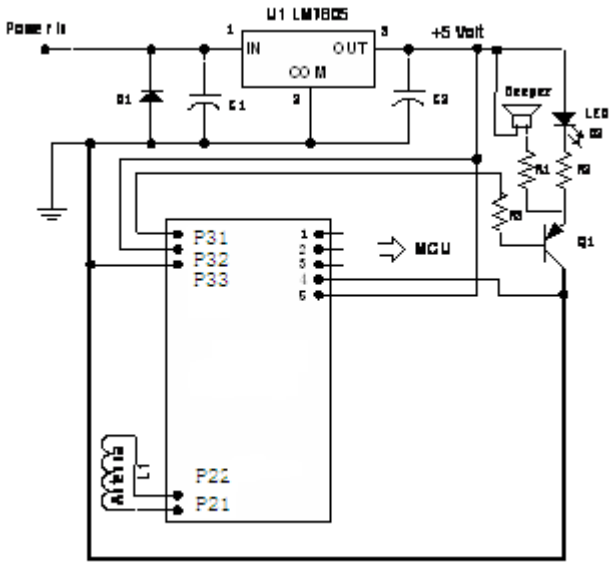


Figure2

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