

RDM630 Proximity Reader Module

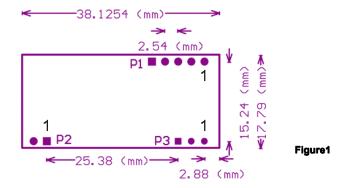
DATA SHEET

Proximity Reader Modules

Operational and Physical Characteristics

Parameters	Description	Photo
Read Range	8-12cm	
Dimensions	38.5mm(L)x18.5mm(H)x8.5mm(W)	9 9 9 9
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 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 - +5.4\	/DC)					
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



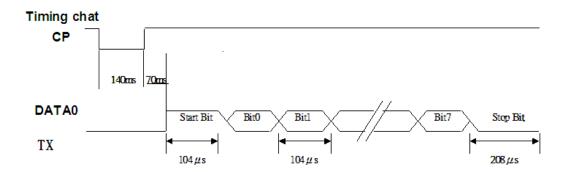
Data Formats

 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



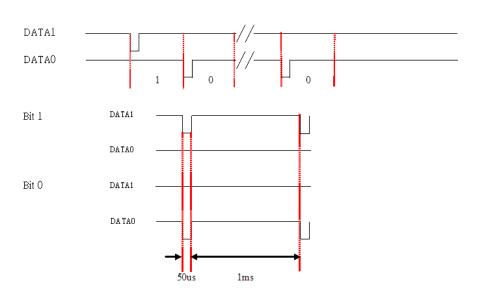
RDM630W1 Output Data Structure, For Exaple: Wiegand 26 bit

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)	Е	Е	Е	Е	П	Е	Е	Е	Е	Е	Е	П	0	0	0	0	0	0	0	0	0	0	0	0	P(2)
EVEN Parity(E)								ODD Parity(O)																	

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

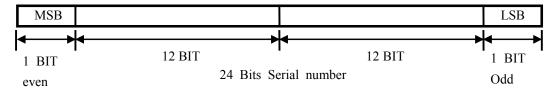
P(2):Parity Stop Bit, 14-26 bit ODD Parity bit

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

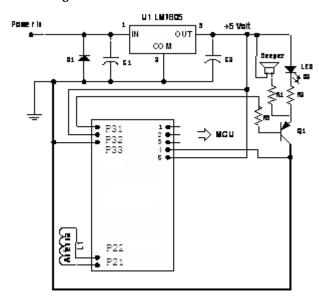


Figure2

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