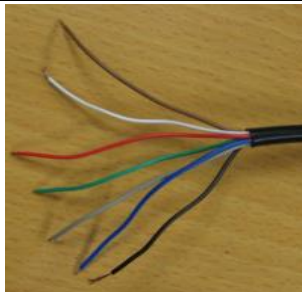




Datasheet (v1.2)

Product P/N	RWD-R022-Y31	Product	125kHz HID Wiegand 26 Reader
Product Classification: Access Control			
1. Reader diagram			
2. Reader dimension 80 * 43 * 13 (mm) Internal-Antenna			
			
3. Specification			
Operating Frequency	125kHz		
Output Format	Wiegand 26		
Power Requirement	DC9~12V		
Electric Current	50mA		
Supporting Card Type	HID		
Reading Distance	> 50 mm (depending on card / tag)		
Indicators	LED (Green , Red) & 1 Buzzer		
Operation Temperature	-10℃ ~ + 70℃		
Storage Temperature	-20℃ ~ +80℃		
Humidity	0% ~ 95%		
Color	Black		
Weight	70g		

Wiring Description:

Wiegand 26		
RED	VCC (DC9~12V)	
BLACK	GND	
GREEN	DATA0	
WHITE	DATA1	
BROWN	HOLD	
BLUE	LED	
YELLOW	Buzzer	

● 26-bit Wiegand output format

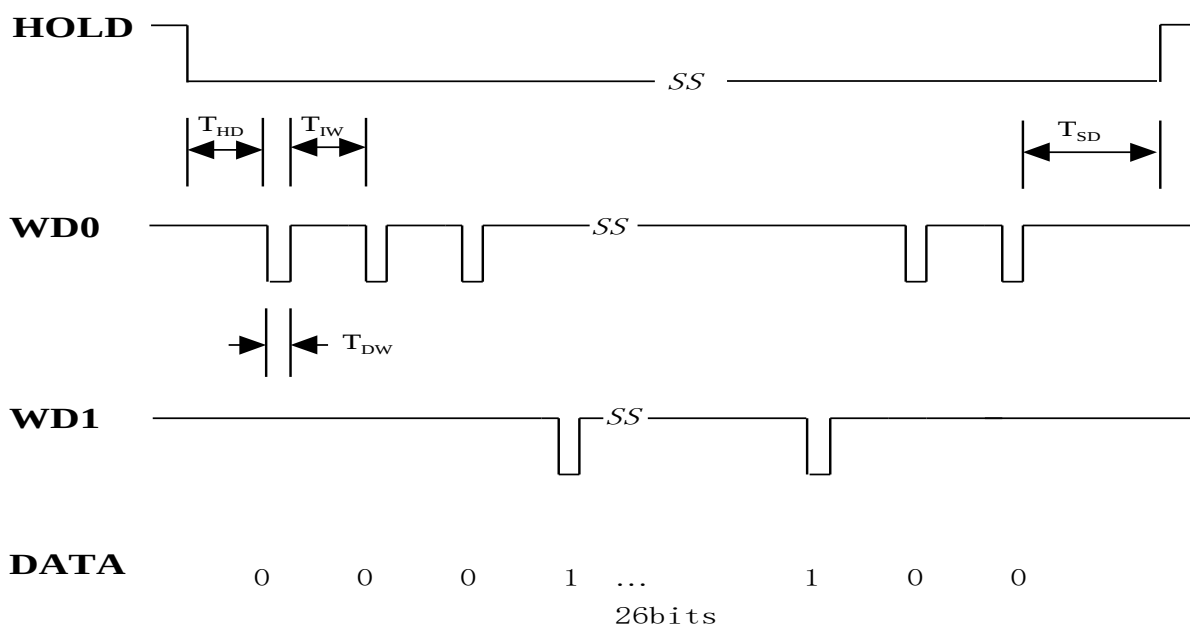
26-bit Wiegand format is made up with 26 bits data, which includes 24 bits user information and 2 check bits. Among the 24 bits data, the first 12 bits are for Even parity check, the latter 12 bits are for Odd parity check. Wiegand output format is as follow:

bit	0	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
	PE	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	PO
		E	E	E	E	E	E	E	E	E	E	E	O	O	O	O	O	O	O	O	O	O	O	O	O	

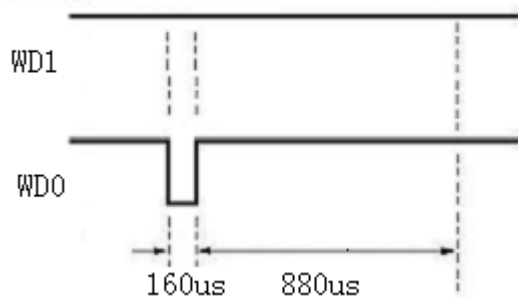
- “PE” is Even parity check bit, “PO” is Odd parity check bit.
- Data bit indicate with “E” is used for Even parity check, Data bit indicate with “O” is used for Odd parity check.

● 26-bit Wiegand format Output Time Sequence

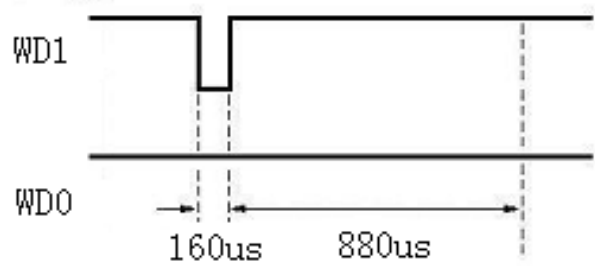
SYMBOL	DESCRIPTION	VALUE(Typ.)
T_{HD}	Sending Start Delay	1.2ms
T_{SD}	Sending Stop Delay	1ms
T_{DW}	Data pulse width	160us
T_{IW}	Data pulse interval width	880us



Waveform of state 0:



Waveform of state 1:



- If there is no data to be sent, both Data0 and Data1 are at high electric level.
- Data0 will produce a 160μs low electric level in Data0 line.
- Data1 will produce a 160μs low electric level in Data1 line.
- The falling interval of the two adjacent data is 880μs.