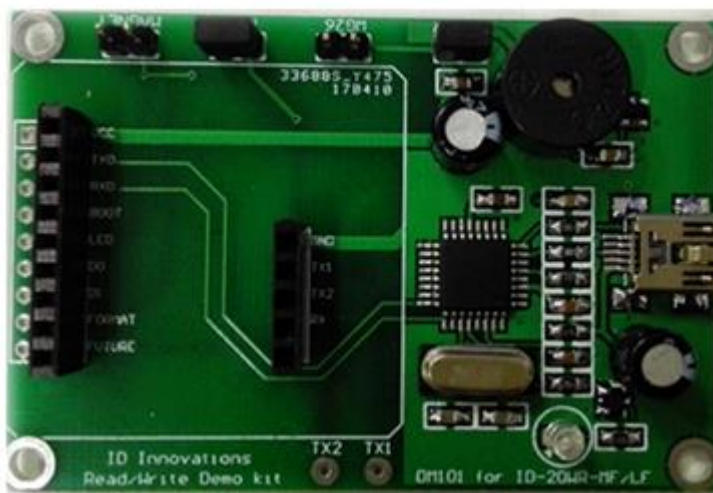


# **ID-20WR-LF**

## **Reader/Write Module**

### **User Manual**



**ID Innovations**  
**Advanced Digital Reader Technology**  
**-----Better by Design**

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## Summary

The ID-20WR-LF series contactless card Read/Write module is based on 3 types 125khz read and write chip. They come with the choice of external antenna and are suitable and for embedded applications and general Electronic Devices. The ID-20WR-LF series are user friendly and can be controlled by command from a UART (serial port). Functions are selected by a Pin jumper allowing full control of all functions.

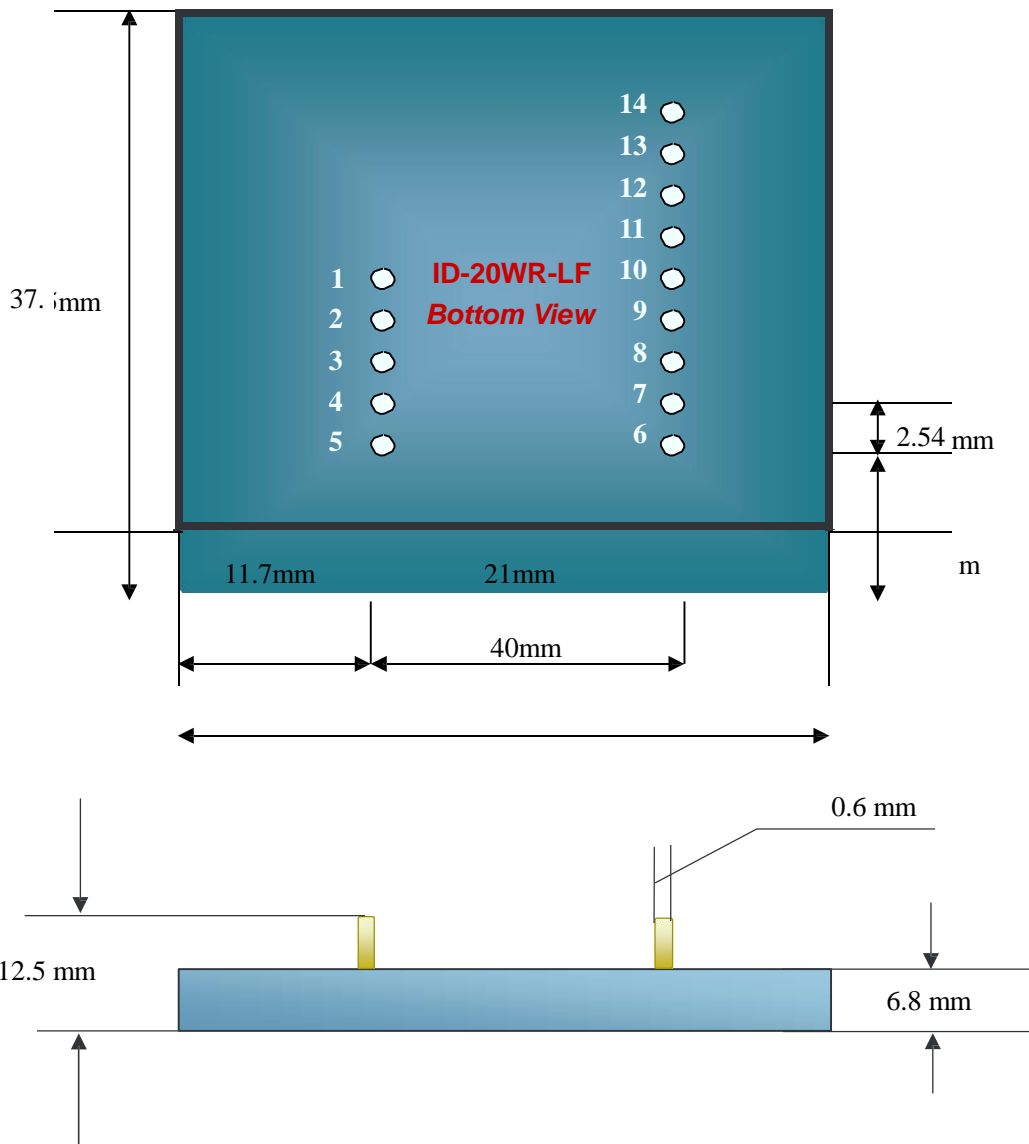
## Characteristic

- options antenna setting: external antenna (standard)
- ISP(In System Program)function
- Small outline
- Low power consumption

## Specification

- Supports: T5557, Hitags, EM4205/4305,
- Model: ID-20WR-LF
- Frequency: 125KHz
- Read/Write distance: external antenna—up to 50-60mm
- External antenna inductance: 345uH
- Read/write speed: <0.3s
- Communication Port: (RS232) TTL / 9600, N,8,1
- Power: 5V DC
- Current consumption: <50mA PK<100mA
- Weight: 80g
- Operating temperature: -10°C --- +60°C
- Storage temperature : -40°C --- +85°C
- Certification: CE, C-TICK, ROHS, FCC

## Dimensions and Pins (bottom view)



- 1-----GND
- 2-----external antenna TX1
- 3-----external antenna TX2
- 4-----external antenna RX1
- 5-----CP
- 6-----Future
- 7-----+/- (Format Select)
- 8-----D1(Data Pin 1)
- 9-----D0(Data Pin 0)
- 10----LED(LED/BEEPER)
- 11----NC
- 12----RXD
- 13----TXD
- 14----+5V

## Pin Description & Output Data Formats

Pin.NO	Description	ASCII	Magnet Emulation (optional)	Wiegand26 (optional)
1	Zero Volts and tuning Capacitor Ground	GND 0V	GND 0V	GND 0V
2	To External antenna TX1	To External antenna TX1	To External antenna TX1	To External antenna TX1
3	To External antenna TX2	To External antenna TX2	To External antenna TX2	To External antenna TX2
4	To External antenna RX1	To External antenna RX1	To External antenna RX1	To External antenna RX1
5	Card Present	No function	Card Present	No function
6	Future	Future	Future	Future
7	Format Selector (+/-)	Strap to GND	Strap to Pin 10	Strap to +5V
8	Data 1	No function	Clock	One Output
9	Data 0	No function	Data	Zero Output
10	LED(LED/BEEPER)	Beeper / LED	Beeper / LED	Beeper / LED
11	No Connection	No Connection	No Connection	No Connection
12	RXD	TTL RXD	No function	No function
13	TXD	TTL TXD	No function	No function
14	DC Voltage Supply	+5V	+5V	+5V