



# SCR28 TTL Series *Manual Insertion Magnetic Card Reader*

## Feature

- Manual insertion
- Low power consumption, CMOS for TTL interface
- ISO 7811 conformance
- Read single, dual or triple tracks (ISO 7811 Track1, Track 2 and Track3)
- Widely operating voltage range 3.3V ~ 5.5V
- Decoding rate range 300 BPS ~ 15000 BPS

## Optional function description

- Slim line bezel, metal frame shielding or flush mount bracket
- Add glue on PCB for water resistant (but not on card detection switch & magnetic head)

## Specification

Item	Content		
	Single track	Dual track	Triple track
Max DC Current @ DC5V	4 mA	6 mA	8 mA
Card operation speed	10 ~ 100 cm/sec		
Voltage	3.3V~5.5V		
Decoding method	F/2F		
Operation temperature	-10 ~ 50°c		
Life time of head	Approx. 300,000 passes		
Card standard	ISO 7811		
Cable length	15 cm		

## Guaranteed operating ranges

Symbol	Parameter	Min.	Type	Max.	Unit
V <sub>cc</sub>	Supply Voltage	3.3	—	5.5	V
I <sub>OH</sub>	Output Current-High V <sub>cc</sub> =5V, V <sub>OH</sub> =2.4V	—	—	-5	MA
I <sub>OL</sub>	Output Current-Low V <sub>cc</sub> =5V, V <sub>OL</sub> =0.4V	—	—	6	MA

TA=25°C

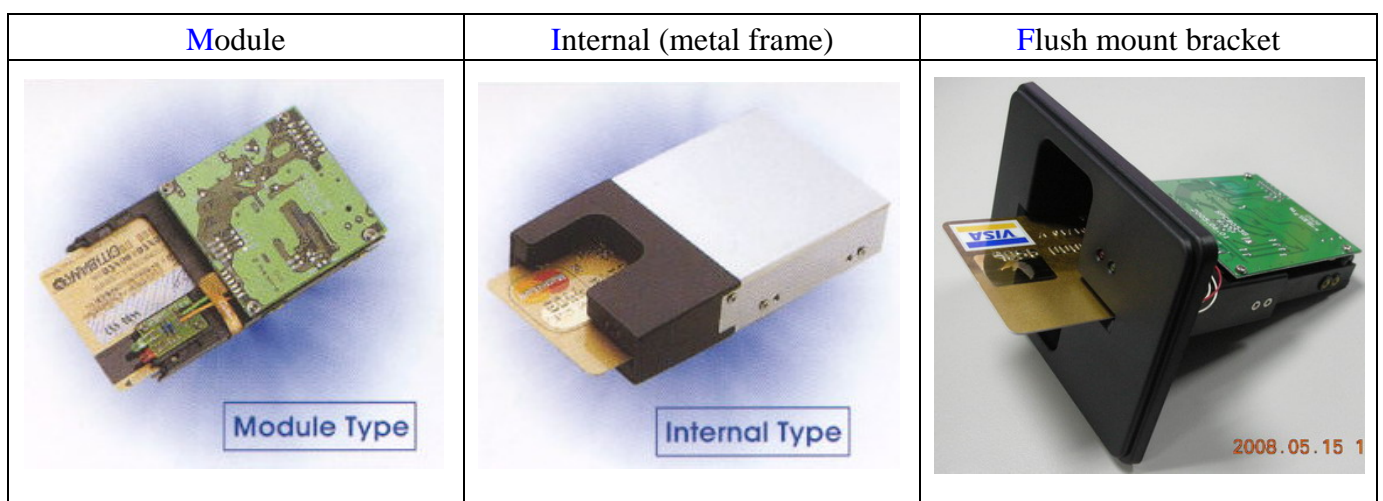
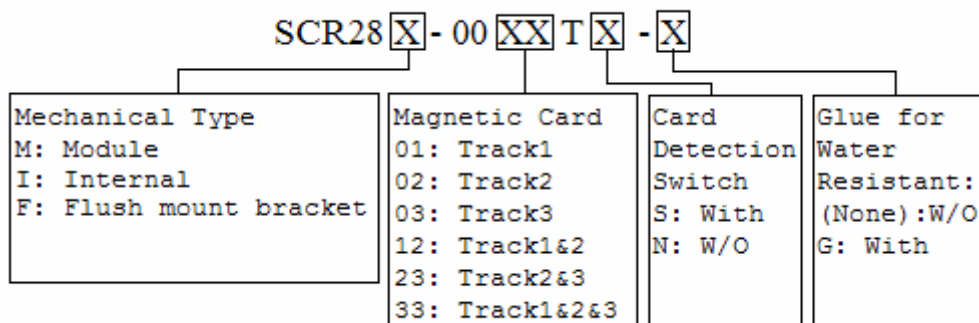


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## Cable pin assignment

NO	Signal	Wire color	Function
1	/RCP3	Black	Track 3 clock
2	/RDT3	White	Track 3 data
3	NO	Gary	Card Sensor N.O. (normal open for S type reader)
4	/RCP2	Purple	Track 2 clock
5	/RDT2	Blue	Track 2 data
6	/CLD	Green	Card Present
7	/RCP1	Yellow	Track 1 clock
8	/RDT1	Orange	Track 1 data
9	NC	Brown	Card Sensor N.C. (normal close for S type reader)
10	Vcc	Red	DC power supply
11	GND	Black	Power ground
CG	Case ground	Black	Case ground

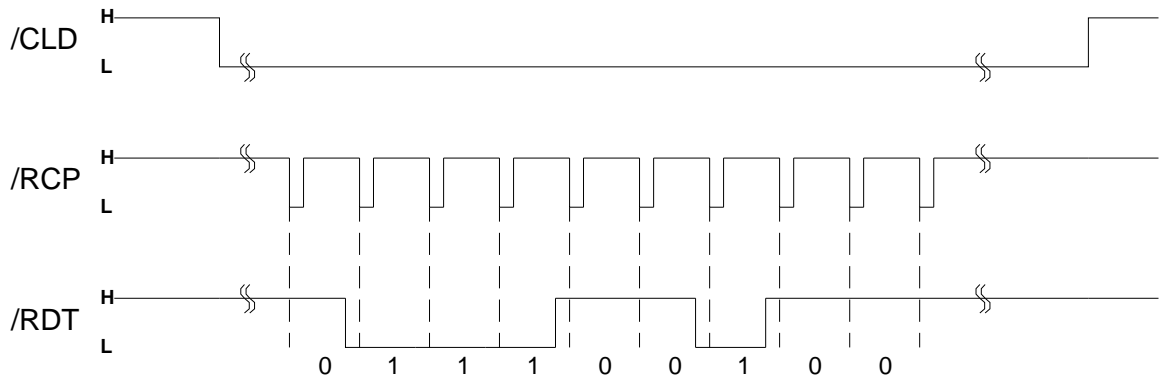
## Model description



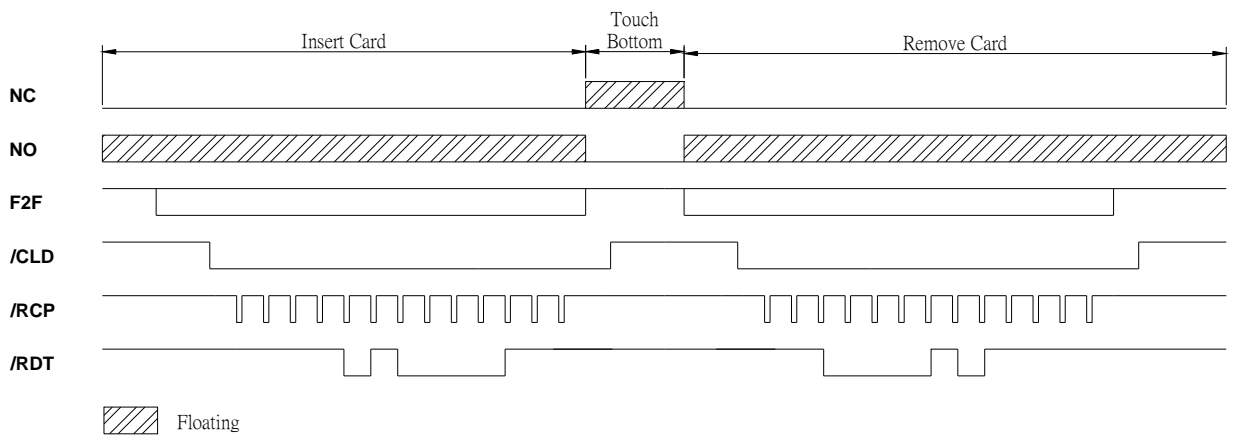
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## Timing

### 1. Without Card Detection



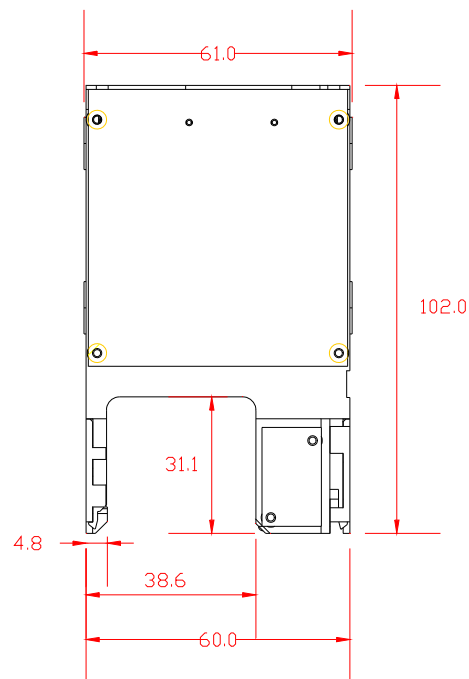
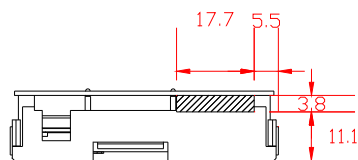
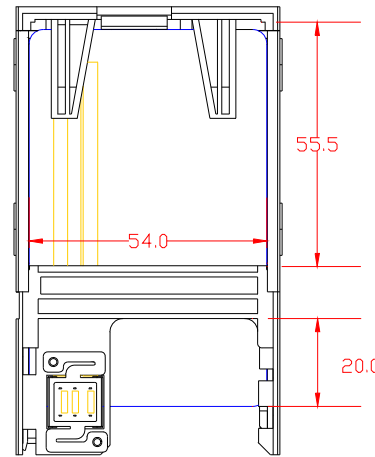
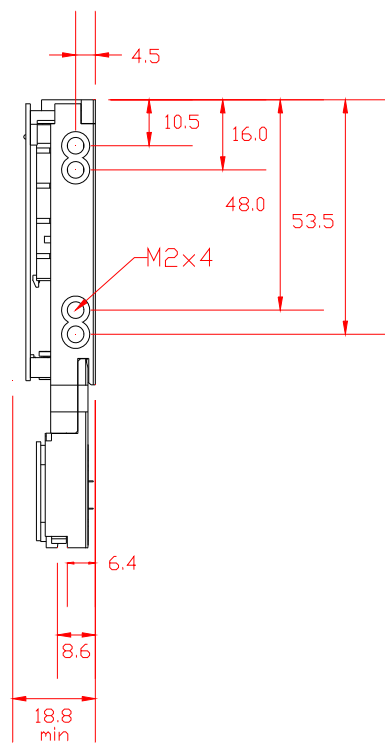
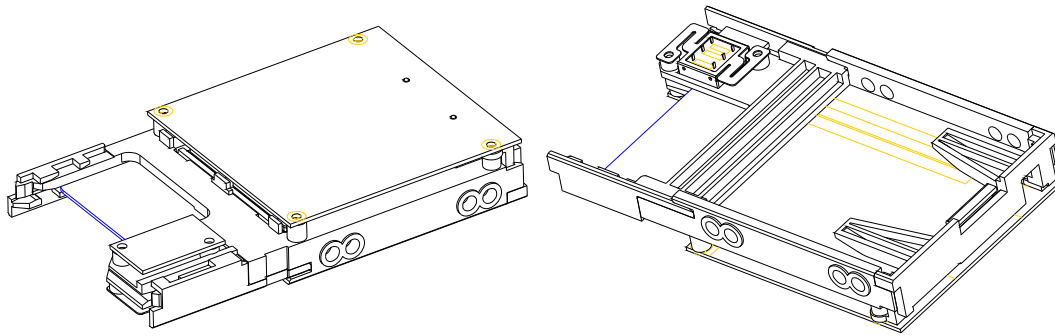
### 2. With Card Detection





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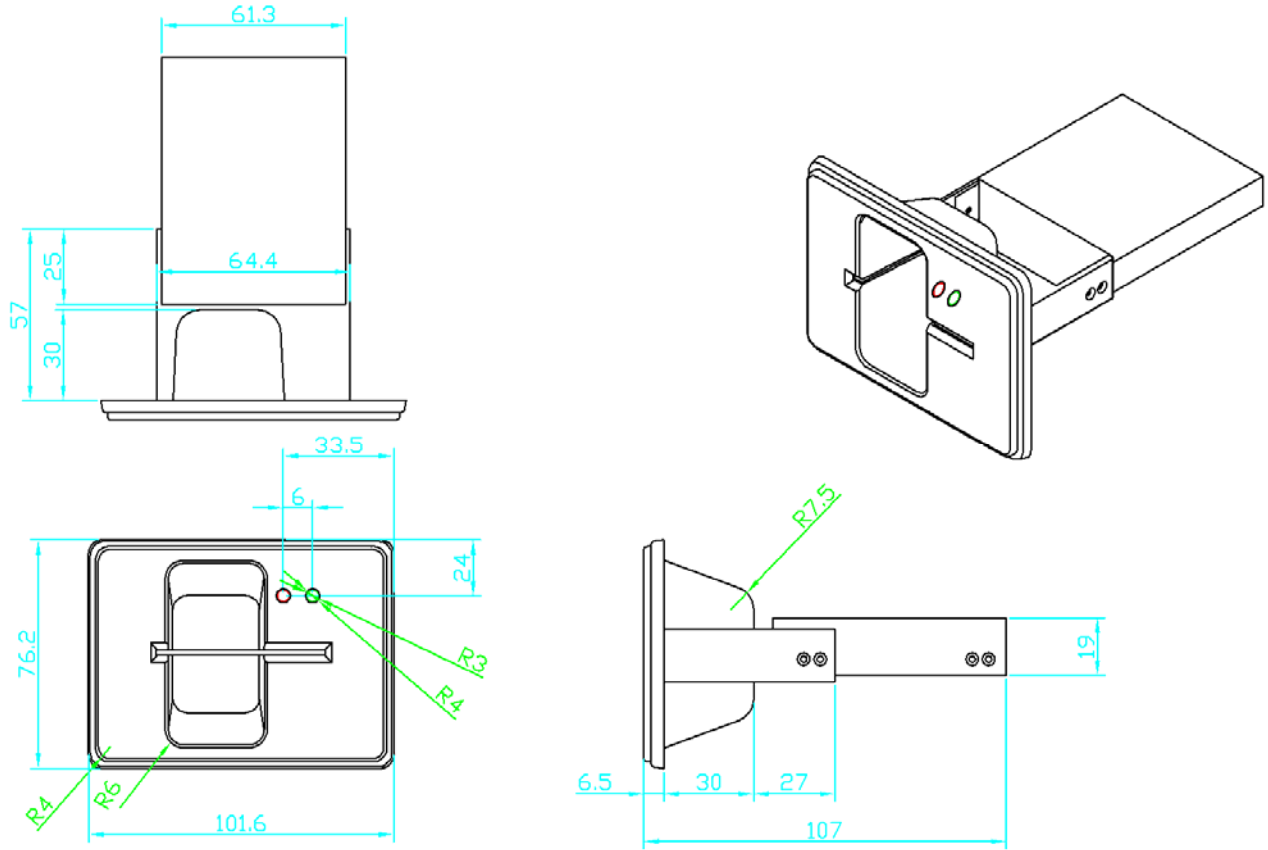
## Mechanical Layout 1 (Module type)





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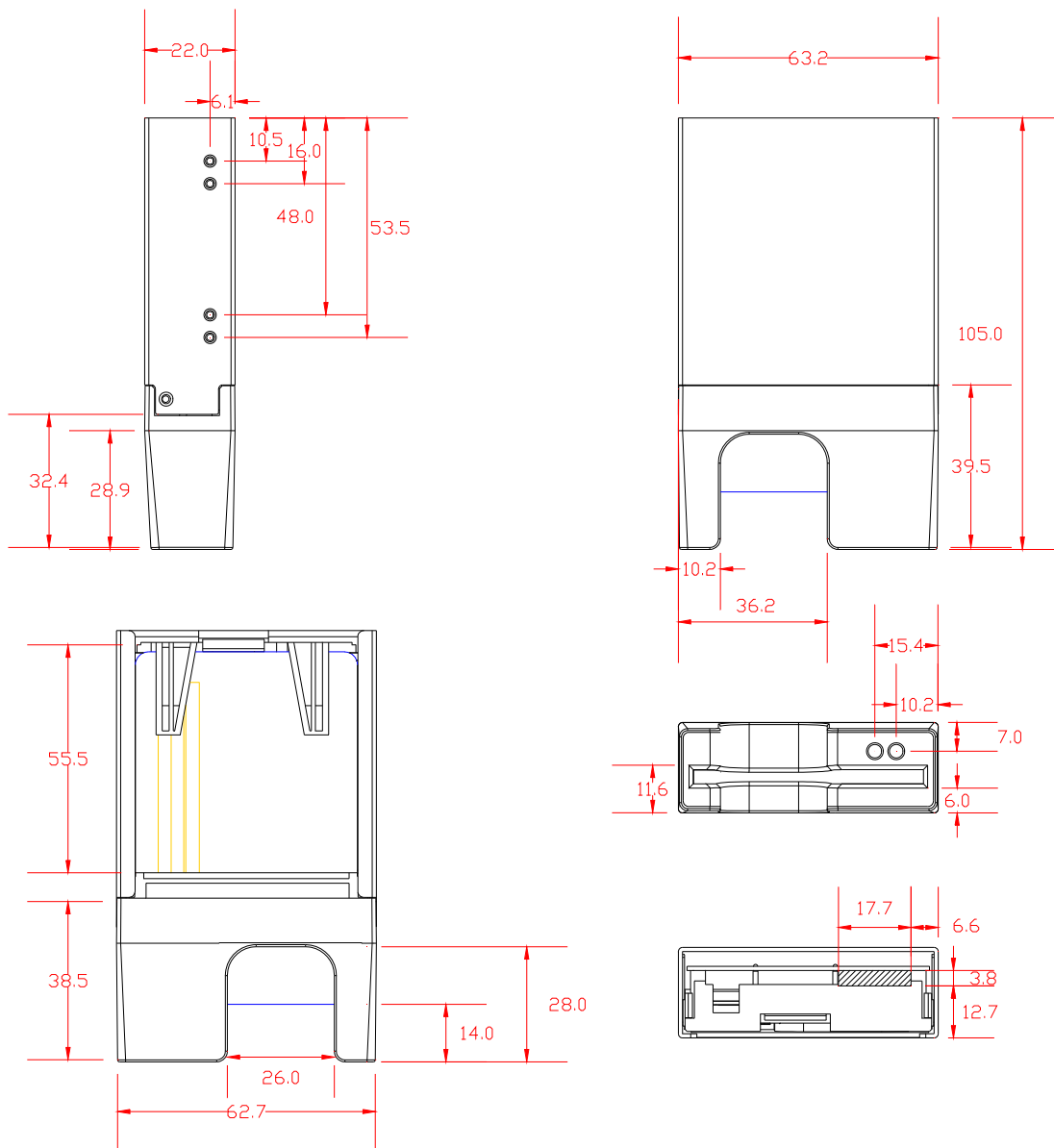
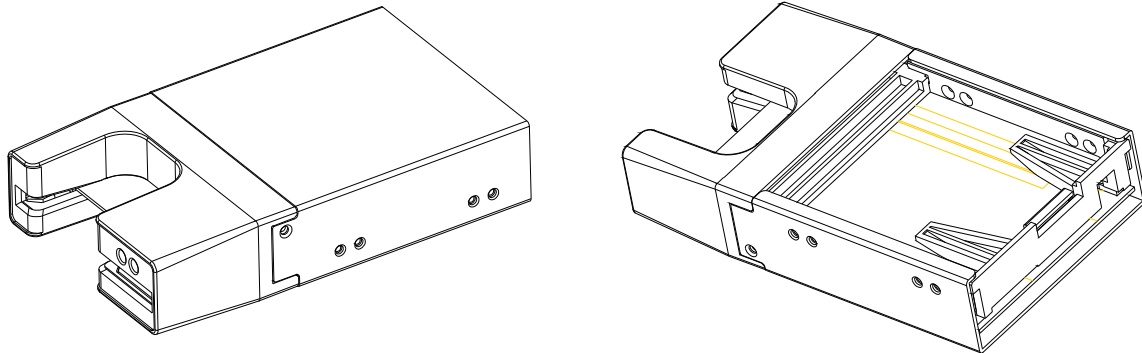
## Mechanical Layout 2 (Flush mount bracket type)





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## Mechanical Layout 3 (Internal type with bezel & metal shielding)

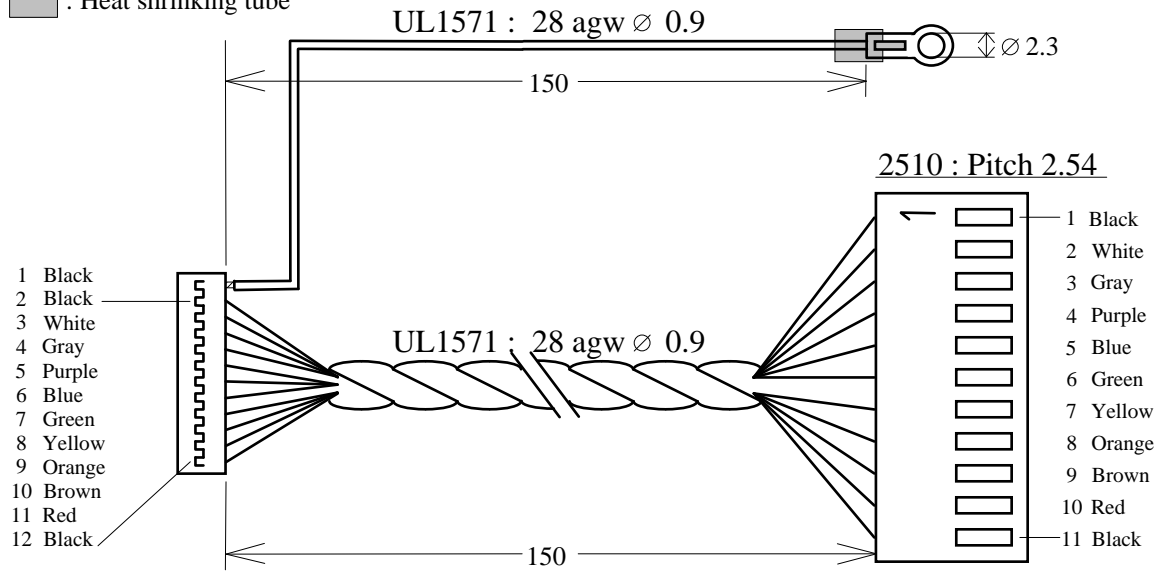




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Unit : mm

■ : Heat shrinking tube



JAE IL-Z-12S-S125C3 or compatible

JAE IL-Z-12S-S125C3 or compatible	2510	CGND	Wire color
1		1	Black
2	1		Black
3	2		White
4	3		Gray
5	4		Purple
6	5		Blue
7	6		Green
8	7		Yellow
9	8		Orange
10	9		Brown
11	10		Red
12	11		Black