

# Access Reader Manual

## The RF card information reading device is mainly used in:

Access control attendance Equipment ID \ IC card data collection terminal; Card System ID, IC card data collection terminal.

### 1、 Performance index:

Spec	ID Wiegand	IC Wiegand	ID RS485	IC RS485
Working voltage	DC 9 ~ 15V			
Working current	Max 50mA; standby 30mA		Max 60mA; standby 40mA	
Working frequency	125 ± 1KHZ	13.56MHZ ± 5KHZ	125 ± 1KHZ	13.56MHZ ± 5KHZ
Standard	/	SO14443A	/	SO14443A
Reader response time	120mS	20mS	120mS	20mS
Support card operation	Reads the card serial number			
Communication interface	Wiegand		RS485	
Support card	EM4001 and Compatible card	Mifare 1K/4K etc	EM4001 and Compatible card	Mifare 1K/4K etc
Operating distance	80~180mm	40~80mm	80~180mm	40~80mm
Equipment protection	The power reverse protection, Data line voltage protection, max ± 18V			
The data transmission distance	>100 M	>100 M	>500 M	>500 M
Operating temp	-43°C ~ 70°C			
Storage temp	-40°C ~ 80°C			
Protection degree	IP65, Anti spraying, dust			

### 2、 Cable definitions:

Cable Color	ID Wiegand	IC Wiegand	ID RS485	IC RS485
Red	VCC “+”			
Black	GND “-”			
Green	DATA 0 Wiegand data cable		R+ RS485 to the positive data terminal	
White	The LED control line, Active low		No	
Yellow	DATA 1 Wiegand data cable		R- R485 to the negative data terminal	
Blue	Buzzer control Line, Active low		No	
Gray	Float for WG26, GND for WG34 way		No	

### Factors that influence the reader reading distance and install Caution:

- Metal interference: a large area of metal material will shield or interference emission of electromagnetic waves of the machine, and impact read slow or can't even read. during installation, the machine should be made at least 3cm away from the metal above the mounting surface.
- Mutual interference: if the distance between the two planes reader device less than 0.5 m, they will interfere with each other. Therefore, two or more, if need to install in the same location, the distance between each should be more than 0.5 meters.
- Power interference: If power is not in good quality, will cause voltage instability, Corrugated much impact on the reading distance.
- Electromagnetic interference: external electromagnetic clutter can interfere with card reader
- Different cards: the card reading distance is different, sometimes even a few cm difference
- Install Caution: reader must be installed on wooden, concrete or brick wall, or placed on the desktop. there shall be no large-scale iron and steel products within a radius of around 10 cm.