UHF long-distance reader

Instructions

Constents

一 Reader Brief

The products can be compatible with multi-protocol,integrated design ,quickly read, multi-tag read,proof-water, can be used widely in RFID systems,the mainly applying site is:

1 Logistics and warehouse Management:Goods flow,warehouse management,and the flowing management of mail,parcel,luggage.

2 Intelligent parking Management :Parking management and automatic charge

3 Productive lines Management: Production process fixed identication

4 Product counterfeit-proof inspection:Using memory's write-protect functions inside tags,and identifying with true-false of products

5 Other fields:Used widely in club management,library,student'school,consumption management,time management,dinner management,pool management

1．Reader use

It can be used goods identifation and data gather,making use of good speciality ,specially in following field can be used widely

1）Transport managenment:Road,railway,container management and so on

2）Motor vechile management:Police and transportation department manage and control all types of motor vechile

3）Passing –bridge charge:As the product can read tag data with long-distance .so can charge when vechle arenot need to stop..

4）Customs management:Costoms through and transfer'goods and vechile managment

5) warehouse and logistic management:Goods flows ,warehouse management and mailing,package,airline luggage's flowing managment

6）Parking management:realizing management and charge automation

7）Door-control management:including vehicle and personnel entry/exit management

8）Arts produing line:Monitoring parts in whole production

2．Reader main functions

1）Arousing tag：Only tag that be aroused can   transmit with reader ,prevent disturbing Of other tags outside systems,ensure news changing credibility and exactly of readers can systems

2）Reader tag data:Not only can read tags'ID ,but also can read data in appointed tag storage area;Not only can read only one tags'data,but also can read at the same time multi-tags'data during antenna range

3）Write into tags data :it can write into data in appointing tag stored area

4）It can connect directly control facility with standard weigand26,34   interface ,no need develop,use simply

5）Connecting controller and PC by standard communication interface ,doing data communication and exchange ,offer SDK to further develop

3．**Reader technical parameter**

 1）Frequency Range：ISM 902~928MHZ (FCC) or 920~925MHz (CHN)or other frequency

 2）Read card distance:can adjustable range:1-12M

 3）Read card sensitivity:double-polarization read card mode

 4）Read card time:Single-tag 64 bits ID number read timing<6ms

 5）Working voltage: DC+9V

 6）Working temperature:－20℃ ～ +80℃

 7）Storage temperature：－40℃ ～ +125℃;

CONNECTOR AS FOLLOWS::

Serial number	Definition	Cabel colour	Fuctional
1	DC+12V	red	+9V～15V+
2	GND	black	V-
3	TXD	brown	RS232 (PIN2)
4	RXD	yellow	RS232 (PIN3)
5	GND	blue	RS232 (PIN5)
6	Triger	gray	TRIGGER
7	DATA1/485A+	white	DATA1 or 485R+
8	DATA0/485B-	green	DATA0 or 485R-

二   Structure and reader displaying

- We offer DEMO to set and test,more specific 《915Mz DEMO INSTRUCTION》For Your Consideration

三　Reader'settings and notice

The reader include: SLU Series　reader、RS232 singnal、+12Vpower adapter、setting bracket。
Please check the accessories after unpack, please contact 。

Reader

Setting clamp

Reader line
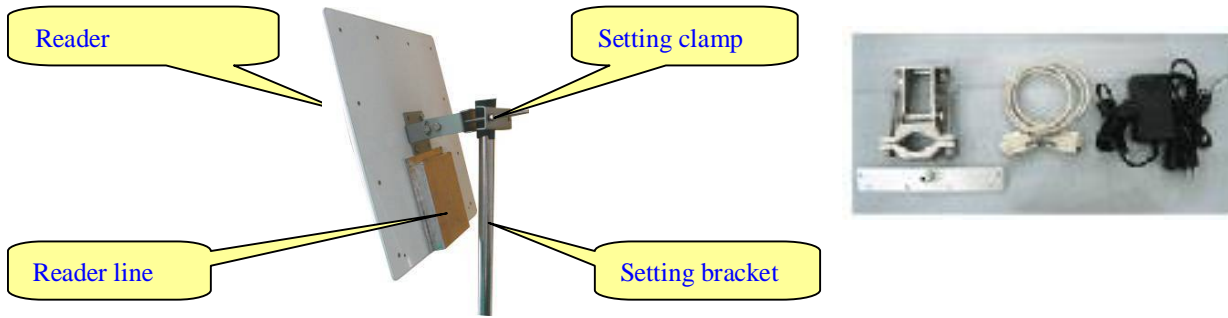
Setting bracket

Reader

Accessories

1 READER'S SETTING MODE

Reader bracket setting mode have two types: "flank 1 pattern fixing"and "L pattern fixing" as follows' chart:can choose fixing mode according to application needs and spot fact instance ,generally speaking , "flank 1 pattern fixing" its distance is short a little .but fixing simple."L pattern fixing" its distance is longer than "flank 1 pattern fixing",but fixing is complex

reader

reader

道路路面

道路路面

Reader flank 1 pattern fixing

Reader L pattern fixing
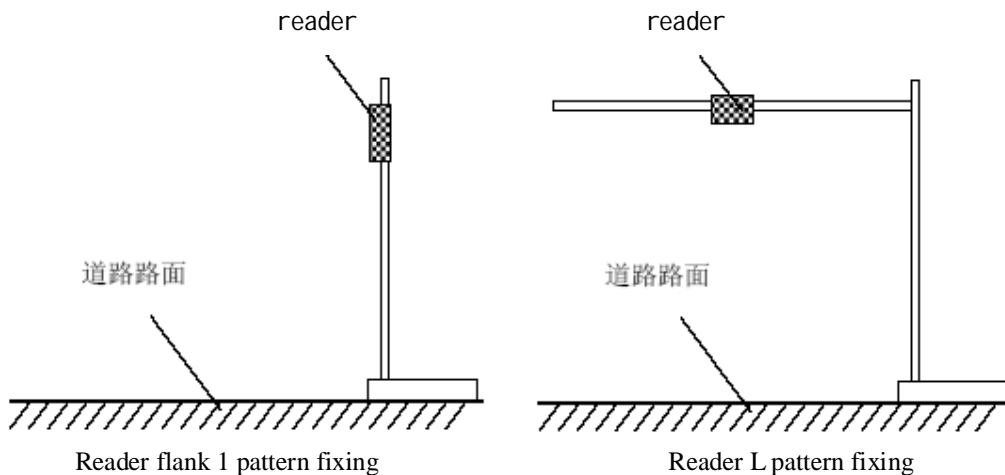
2 Reader'fast and length'revise

When frank fitting ,it demands that the crutch dia.of the reader 50 to 60mm while length2.2m Using stain steel material that more than 1.3m thick is the best choice. Fix the reader to the top of the crutch with the self-provided fastening pin in the casing of SLU Series reader .Adjust the height

from the center of SLU Series reader to the level of carriage way, according to the vehicle style(mainly indicates the oversize vehicle and landauter), generally about 2.0m(from 1.2m to 2.2m)

When crutch top fitting like the shape of letter L,it demands the dia. of L shape (or dragon-door shape) crutch is from 60 to 80mm,while rail dia.60 to 60mm.It is best to sue stain steel material that more than 12 to 20mm thick. Fix the SLU Series reader to the rail that near the middle carriage drive. The height that the rail to the ground is needed to adjust from 3.5m to 4.0m,according to the height of vehicle
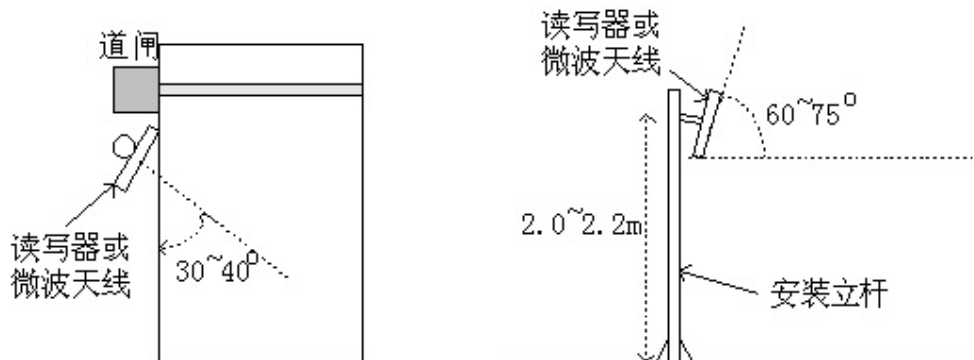
3　Reader's angel controll

图14　　reader picture

Antenna angular:indicates the included angle between the antenna and level when the antenna inclines to the ground,about 60~75°

azimuth angle of antenna:indicates the deviation angle when antenna deflects to the direction of carriage drive,about 30~40°

4　Sample application - fixing-vechile parking management

Choose reader system installations site'principle:

（1）　The beeline distance cannot beyond 1m between reader and brake

（2）　RDM9801A reader's location and tags no any block

（3）　Reader and controlling instructments should keep close ,and use shield communication cable…Detailed spot installment can confirm according to detailed instance

1) Spot fixing mode one：

No middle isolated Safty island road .Road controlling facility (brake) fix both side of road,vehicle pass reading card area at less than 30km/s

In this instance:reader(antenna)should close to brake ,ensure that tags'effective reading range（the farest beeline distance is 0.5m-10m） can cover with entry/exit entry winding or exit winding ..As follows
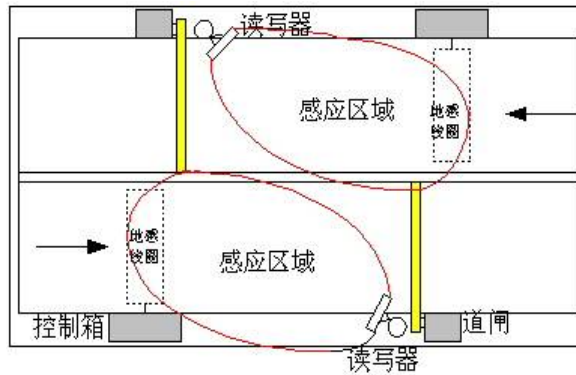
图 15 fixing instructions

2) **Spot fixing mode two**:

No middle isolated Safty island road .Road controlling facility (brake) fix on no middle isolated Safty island road ,vehicle pass reading card area at less than 10km/s

In this instance:reader(antenna)should close to brake ,ensure that tags'effective reading range(the farest beeline distance is 0.5m-10m) can cover with entry/exit entry winding or exit winding ..As follows
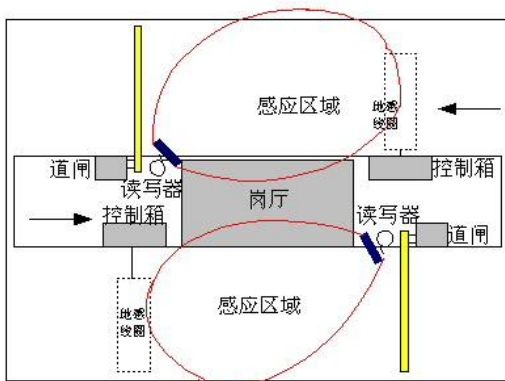
图16 reader spot installation shows

3) **The installation position of rfid tag：**

Regarding the compact car(include ordinary van)，specific stick way refer to A.B.C as

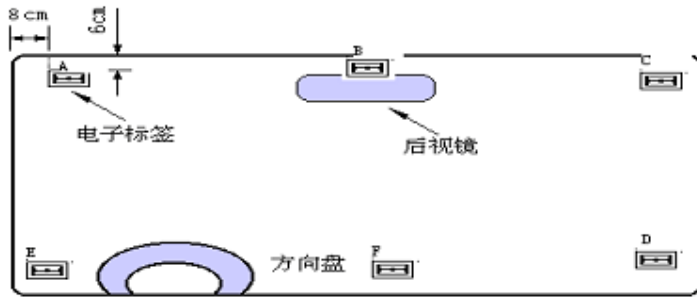follows.For Giant Trucks or bus,please refer to D、E、F as follows.

图 2

- **Best set way for rfid tag：** Tag should be setted up with the same direction as antenna

Once antenneon the right,tag should be setted on the right as A、E,if antenna on the front oflane,tag shoud be sticked to B、F.Once antenneon the left,tag should be setted on the left as C、D

四 The second developing

Users can make the second exploitation to the application software reader according to the need. .We provide the exploitation bag basis on the C language ,which supports the environment of VC++,vb, Dephi and C+Buider and so on .Please make reference to the <<NRreader SDK instruction>>about the use of exploitation tag.

五 Notes and service

✦ Installation And Debugging far way 30cm at least at working mode

✦ Working mode please away from strong magnetic field

✦ Within one year after goods are sold out by us, except man-made breakage and nature calamity, other quality issues for this product will be repaired by us without charge