UHF-RW-MP-232-V1

Embedded UHF Reader/writer with RS232 interface

Features

- Operation mode : read/write UHF Tag ID & memory
- support multi-tag reading
- Antenna : build-in circular polarization antenna
- Standard Frequency : 902-928Mhz (can be defined by user)
- optional interface : RS232 / wiegand
- Transmission Power : < 30dbm (software programmable)
- support : ISO18000-6C EPC G2 or ISO18000-6B UHF tag
- power supply : +9V DC ,3A
- free software pack (Delphi demo program with source code , protocol ..)
- software compatobe with UHF-RW-MP-232-D2
- **7 dbi antenna built-in version**
  - reading range : ~3-5 meters (depend on site environment)
  - Peak power Transmitter : < 1 watt
  - Dimension : (220x220x30)mm
  - weight : 2kg
- **12 dbi antenna built-in version**
  - reading range : ~5-8 meters (depend on site environment)
  - Peak power Transmitter : < 2 watt
  - Dimension : (440x440x50)mm
  - weight : 5kg

Ordering part No

UHF-RW-MP-232-V1-7dbi	Embedded UHF G2 & ISO18000-6C reader/writer with RS232 interface / 7dbi antenna / US frequency : 902-928 Mhz
UHF-RW-MP-232-V1-12dbi	Embedded UHF G2 & ISO18000-6C reader/writer with RS232 interface / 12 dbi antenna / US frequency : 902-928 Mhz

Wire assignment

Item	Comment
Red	+9V
Black	GND
Yellow	Wiegand DATA0
Blue	Wiegand DATA1
Purple	RS485 R+ (optional)
Orange	RS485 R- (optional)
Brown	GND
White	RS232 RXD
Green	RS232 TXD
Grey	Trigger input (TTL level)

Remarks : RS485 interface is not available for RS232 version.

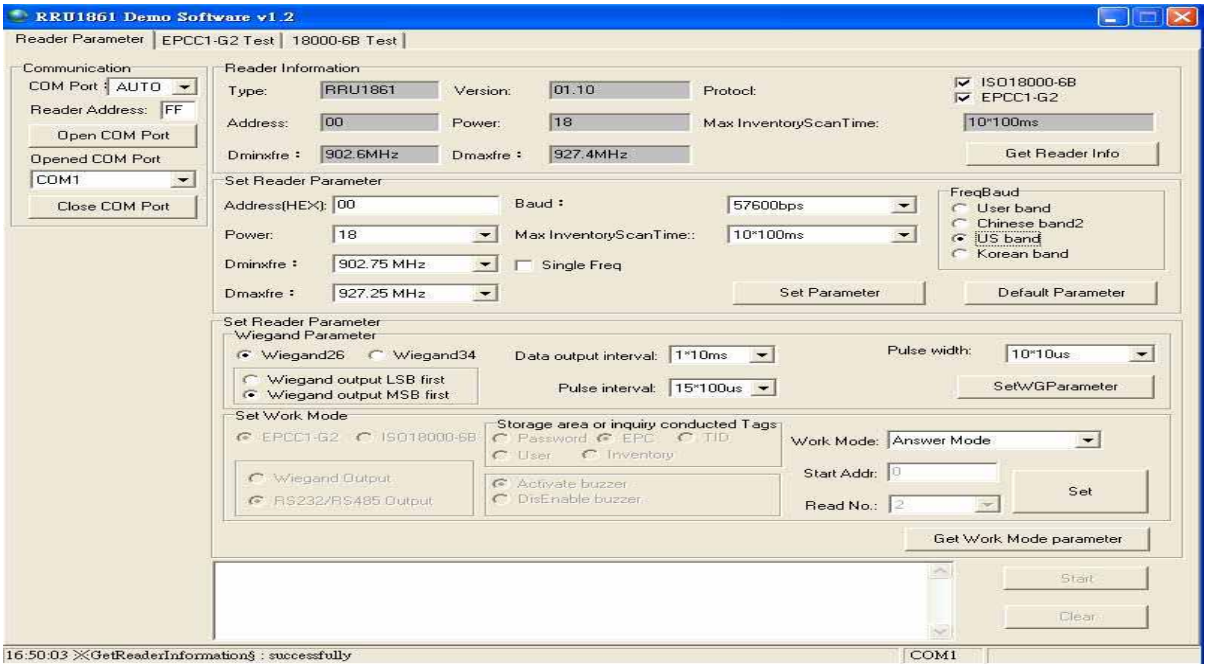
Demo Program Instruction

Connected reader with PC through RS232 com port.

Run the demo program from path:\ \demo program\RRU1861demomain.exe

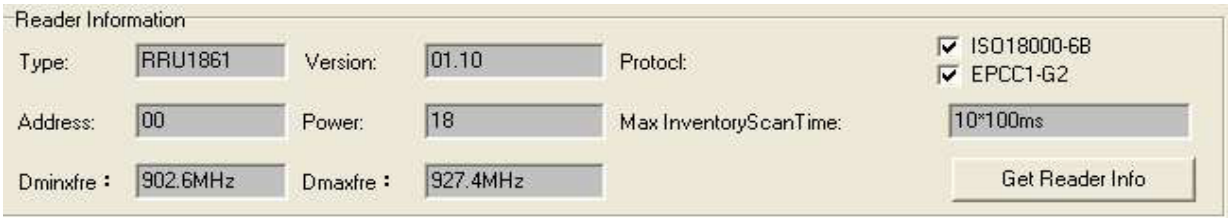
Click on "Reader Parameter" from menu bar

Select correct COM port or "AUTO" and click on "Open COM Port"

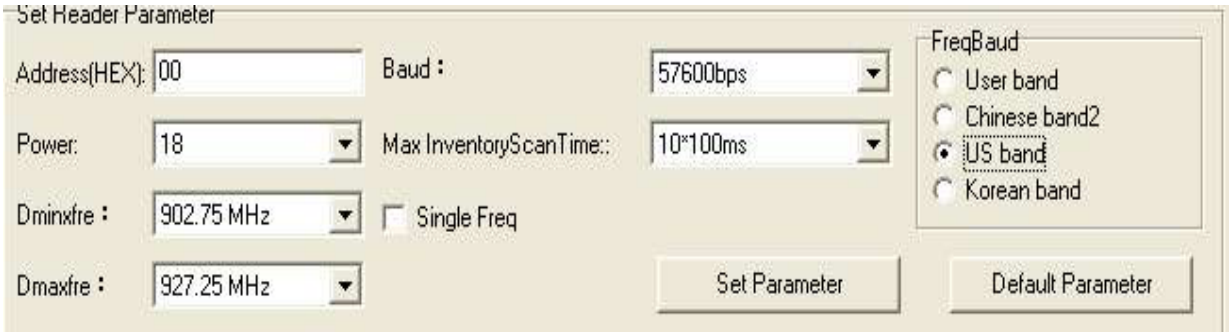


Reader Information

Click on "Get Reader Info" to get Reader information



Set Reader Parameter



Address : Reader address
Power : reader power from 0-18 level
Dminxfre : select Min. UHF frequency
Dminxfre : select Max UHF frequency
Baud : select com port baud rate
Max InventoryScanTime : select Scan time (e.g. 10*100ms = 1 second / scan)
Single Freq. : set single Frequency
FreqBand :
User Band – can be defined by user (902.6Mhz to 927.4Mhz)
Chinese Band2 – 920Mhz – 925Mhz
US Band – 902-928Mhz
Korean band – 917Mhz – 923Mhz
Set Parameter : save parameter value
Default Parameter : set to factory default setting

Set Reader output Parameter

Select Wiegand output parameter

Set Work Mode

Select UHF Tag type - EPC-G2 or ISO18000-6B
Select Output Interface - wiegand or RS232 output
Storage area or inquiry conducted Tags
Select data memory (Password , EPC ,TID , User or Inventory)
Activate or Disable buzzer
Work Mode :
Answer Mode :
Need send command to reader for operation , select this mode when do the Tag read / write testing
Active Mode : read Tag automatically and output data as the parameter setting
Trigger Mode (Low) : reader is trigged by Trigger pin (Low)
Trigger Mode (high) : reader is trigged by Trigger pin (Low)

SET : save work mode parameter
Get Work Mode Parameter : Get current work mode parameter

EPC – G2 Testing

After Reader Parameter and work mode setting , click on “EPCC1-G2 Test”

Remarks :

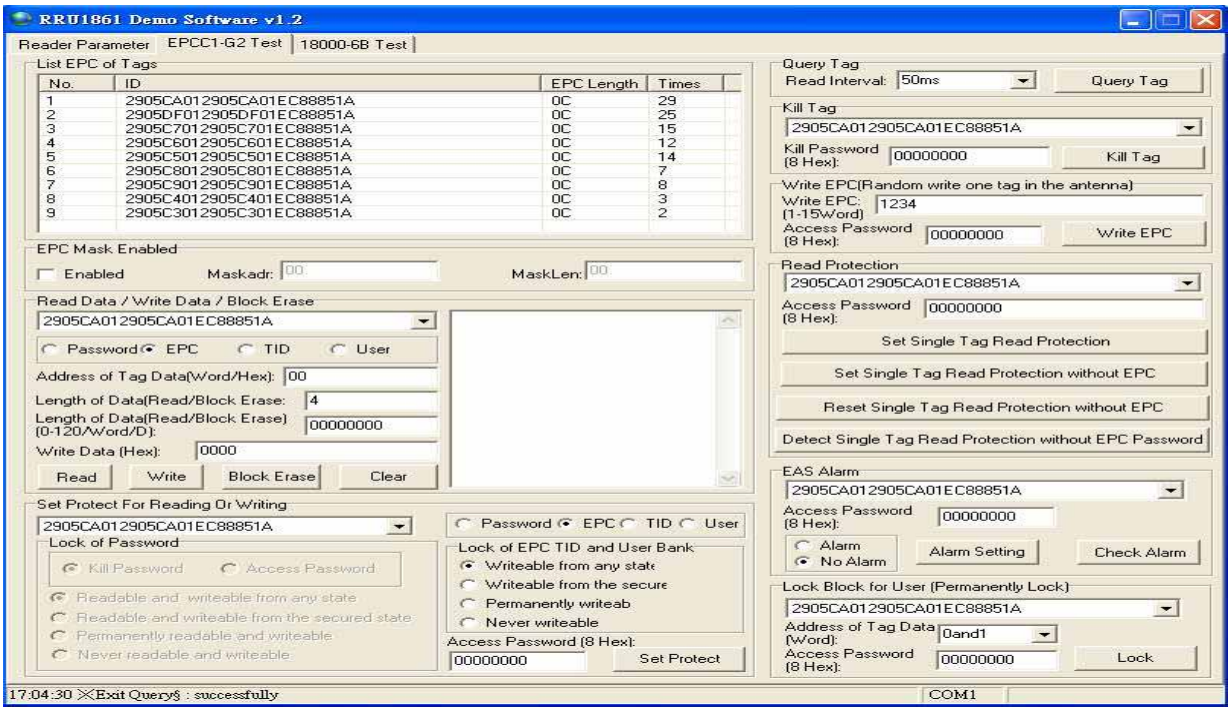
Work Mode need set to “Answer Mode” for operation.

Click on “Query Tag” to start Tag reading

Click on “Query Tag” once again to stop Tag reading

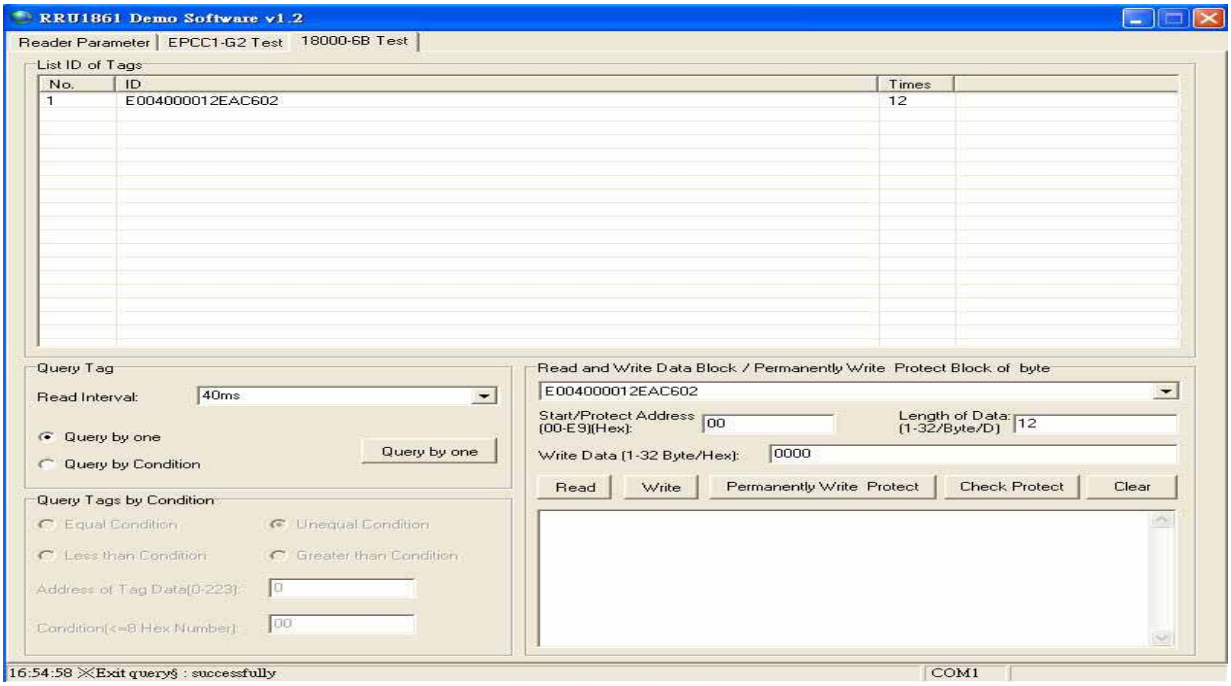
Similar operation for other button (Press once start and Press again to stop)

Other read/write operation , pls refer to EPC-G2 datasheet



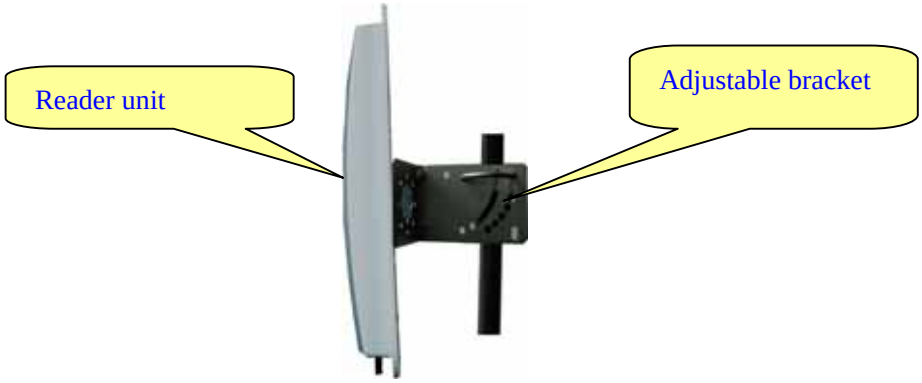
18000-6B Testing

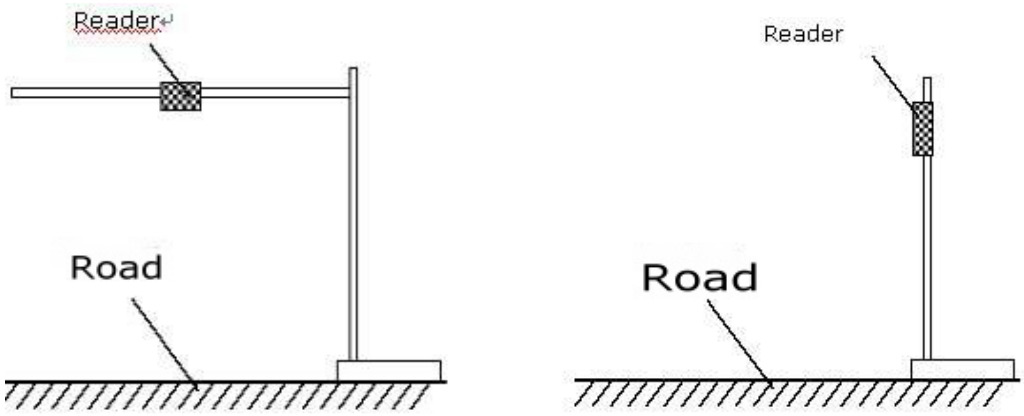
After Reader Parameter and work mode setting , click on “18000-6B Test”



Other read/write operation , pls refer to 18000-6B datasheet in detail

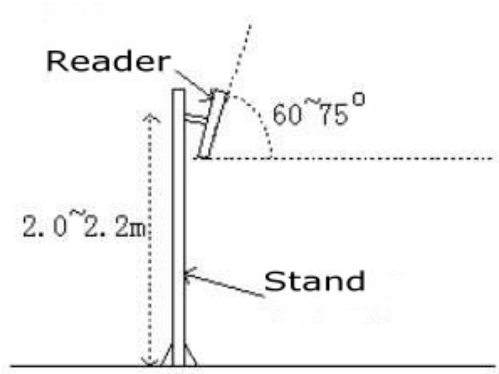
Reader installation





Horizontal installation　　Vertical Installation

Adjust the reader to get the best detection performance



When measuring or testing the reader's read range, make sure that the tag is properly oriented to the reader antenna, and for optimum performance, be sure the operator's finger is not within three inches of the tag's antenna surface.

Environment Interference will affect the reading distance.