

134K-RW-USB-D1

Communication Protocol

Communication Setting

The communication protocol is byte oriented. Both sending and receiving bytes are in hexadecimal format. The communication parameters are as follows

Baud rate : 9,600 ~ 115,200 bps / Data : 8 bits / Stop: 1 bit / Parity: None / Flow control : None

Command Format

Header + length + reader ID + command code + command data + checksum

	Header	LEN	Reader ID	Command	DATA	CRC
Value	0xAABB					
Length	2 Byte	2 Byte	2 Byte	2 Byte	nByte	1 Byte
Desc.	Start String	Length - From reader ID to DATA	Default "0000"	command	parameter n >=0	XOR From STX to DATA

Reader response format

header + length + reader ID + command code + status + return data + checksum

	STX	LEN	Reader ID	Command	Status	DATA	CRC
Value	0xAABB						
Length	2 Byte	2 Byte	2 Byte	2 Byte	1 Byte	nByte	1 Byte
Desc.	Start String	From device ID to CRC	Random Value if No specify	command	00 = success <> 0 Fail	Return data n >=0	XOR From STX to DATA

Command Set

WriteAnimalID

Function : write animal ID

Command : 0x0203

Parameter :

Dataflag = 0 = 9 byte

Dataflag = 1 = 12 byte

Data Structure :

National ID(5 Byte) + Country ID(2 Byte) + DataFlag(1 Byte) + AnimalFlag(1 Byte) +

Trailer(3 Byte)

Return : NIL

EM4305Write

Function : Write EM4305

Command : 0x0303

Parameter : 1 byte + 4 byte data

Return : NIL

EM4305Read

Function : Read EM4305

Command : 0x0403

Parameter : 1 byte

Return : 4 byte data

EM4305Login

Function : Login

Command : 0x0503

Parameter : 4 byte password

Return : Nil

EM4305Protect

Function : write protect

Command : 0x0603

Parameter : 4 byte protect word

Return : Nil

EM4305Disable

Function : Sleep mode

Command : 0x0703

Parameter : Nil

Return : Nil

SysSetEncoderRate

Function : set encode method and rate

Command : 0x0803

Parameter : 1 Byte

0x05 = Manchester RF/64

0x0A = Bi-phase RF/32

Return : Nil

SysAntennaSta

Function : set antenna status

Command : 0x0C01

Parameter :

00 = Field OFF

<> 0 = Field On (when power on , antenna will be on status)

Return : Nil

WriteEM4001

Function : Set to EM4100 format

Command : 0x0903

Parameter : 5 Byte ID data

Return : Nil

ReadEM4001

Function : Read EM4100 format

Command : 0x1020

Parameter : Nil

Return : 5 Byte ID data

SysBeep

Function : set Buzzer status

Command : 0x0601

Parameter : Nil

Return : Nil

Error code :

0x00 = success , non zero = error

Error code	Description
10	General error
11	Command can't be support
12	Parameter error
13	Read animal ID , CRC error
20	access card error
21	Card reset error
22	Verify error
23	Read card error
24	Write card error