

Long-distance ISO11784/11785 Reader

1. introduction

This is Long-distance ISO11784/11785 reader. This reader supporting animal ear tags using the reading distance is 45cm±10%.



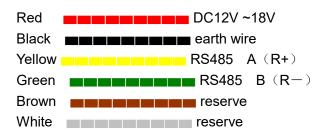
1.1 Pic-1

Feature:

- 1. Support read operations on the EM4305,S256,T5577 according to ISO11784/ISO11785;
- 2. Support ISO11784/5 Standard;
- 3. Size:260mm X 260mm X 35mm;
- 4. Operating voltage: 15V-DC ,operating current: <150mA;
- 5. UART ,RS232 ,RS485 Multiple interfaces can be options;
- 6. Long-distance: Read LF Animal tag more than 45cm;
- 7. High stability: can automatically adapt to the environment;
- 8. High reliability :ESD protection, anti-surge protection
- 9. Application area :pig management, cattle management, sheep management, parking management.

2. Hardware description





This is the string the transport format .Default RS485 address is 0x01, baud rate of 19200, 8 data bits, 1 stop bit, no parity bit ;Buzzer opens by default.

1. Read -Read command

PC ->Send data: [R0108]

'[' Data frame header;

'R' Command type code, 'R' is read a data command

"01" is address, scope 0~FF;

"08" BCC (Verification code), Before the BCC code of the ASCII code of the character value Exclusive-or operation, BCC = 0x5B ^ 0x52 ^ 0x30 ^ 0x31 = 0x08 (Results expressed in characters in hexadecimal); ']' End mark.

-> PC

Reader has read tag data ,return <R010084031ECD07D90861>

Reader does not read tag data, or the data has been read, return: <R01016E>

'<' Data frame header:

'R' Command type code;

"01" address, scope 00~FF;

"00" Return status, "00" read success, "01" Read failed;

"84031ECD07D908"tag data;

"61" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation;

'>' End mark.

2. Setting -Setting RS485 Address command

PC -> send data: [S010F7F]

'[' Data frame header;

'S' Command type code;

"01" is RS485 slave unit drive address, scope 0~FF; (* Note: add settings command from the slave unit device address will be ignored, so setting the slave unit device address can only be connected to a single device to operate, in the network if you use this command from the slave unit device on the bus as a whole are set to the same address) "0F" is the address you want to modify, scope 0~FF;

"7F" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation ,BCC = $0x5B ^0 0x53 ^0 0x30 ^0 0x31 ^0 0x30 ^0 0x46 = 0x7F$ (Results expressed in characters in hexadecimal);

']' End mark。

LDI-A04 -> PC



Set successfully ,Return: <S01006E>

Set failed, Return: <S01016F>

- '<' Data frame header;
- 'S' Command type code;
- "01" is address, scope 00~FF;
- "00" return state, "00" Set successfully, "01" Set failed;
- "6E" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation;
 - '>' End mark
 - 3. Beep Set buzzer command

PC -> LDI-A04

Turn off beep, send data: [B010018]
Turn on beep, send data: [B010119]

'[' Data frame header;

'B' Command type code;

"01" is address, scope 0~FF;

"00" Set the beep status, "00" Turn off beep, "01" Tunn on beep;

"18" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation; (Results expressed in characters in hexadecimal)

']'End mark

LDI-A04 -> PC

Set successfully, Return: < B010018>

Set failed, Return: <B010119>

- '<' Data frame header;
- 'B' Command type code;
- "01" address, scope 00~FF;
- "00" return status, "00" read successfully, "01" read failed;
- "18" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation;
 - '>'End Mark.
 - 4. Default -To restore the default setting command

PC -> LDI-A04

Send data: [D011E]

- '[' Data frame header;
- 'D' Command type code;
- "01" is address, scope 0~FF; (This command as same "2" address set the command, will ignore addresses, So operation only single device when connecting)
- "1E" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation;
 - ']' End mark。

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LDI-A04 -> PC

Set successfully, Return<D010079>

Set failed , Return < D010178>

- '<' Data frame header;
- 'D' command type code;
- "01" address, Scope 00~FF;
- "00" Return state, "00" read successfully "01" read failed;
- "79" BCC Verification code, Before the BCC code of the ASCII code of the character value Exclusive-or operation;
 - '>' End mark