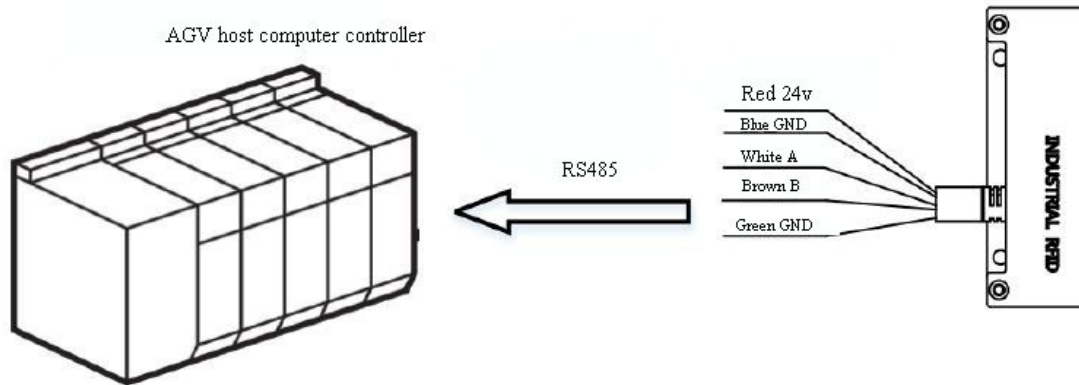


1 RS-485 Communication control

1.1 Connection

Using cable to connect the host computer with the driver is as follows



1.2 Controlled by the MODBUS protocol

1.2.1 Communication specification

	Parameter	Default setting
Way of communication	Single master/multi slave mode	
Operating mode	Modbus RTU mode	RTU mode
Accept/send mode	Half-duplex communication mode	
Communication ID	1-127	2
Communication rate	9600bps, 19200bps, 38400bps, 576000bps, 115200bps	115200bps
Data bit	8bit	8bit
Parity bit	No parity; odd parity; even parity	No Parity
Stop bit	1 bit; 2 bits	1bit

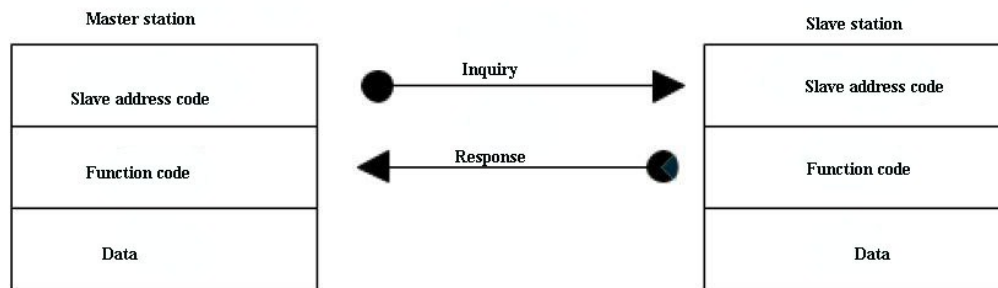
1.2.2 Communication setting

The RS485 communication MODBUS protocol is as follows:

parameter name	parameter list	Setting parameters
Device interface and protocol	RS485- Modbus protocol	RS485- Modbus protocol
Device address	1-127	2
RS485 communication baud rate	1: 9600bps 2: 1200bps 3: 38400bps 4: 57600bps 5:115200bps	115200bps
RS485 odd parity and even parity	1: No parity 2: odd parity 3: even parity	No parity
Communication interruption protection time	0.05s-1s	0.5s

1.2.3 Information

Information format



Inquiry information structure

Slave address code	function code	Data
1 Bye	1 Bye	2 Bye

- function code

The length of the function code information supported by the driver is as follows:

function code	function
04h	Read data from the save register
10h	Write multiple save registers

Response information structure

- Data

Information related to setting the function code.

After receiving the inquiry information from the station, there are three response states: normal response, no response, and abnormal response. The information structure of the response is the same as the information structure of the inquiry.

Slave address code	function code	Data
1 Bye	1 Bye	2 Bye

- Normal response**

After receiving the inquiry from the primary station, the secondary station performs the required processing and responds with a response

1.2.4 Register address

Write multiple save registers (10h)

Register address	Write value (decimal)	Content
2000	0-255	RFID card 1 byte data

2001	0-255	RFID card 2 byte data
2002	0-255	RFID card 3 byte data
2003	0-255	RFID card 4 byte data
2004	0-255	RFID card 5 byte data
2005	0-255	RFID card 6 byte data
2006	0-255	RFID card 7 byte data
2007	0-255	RFID card 8 byte data

Read input register (04h)

The RFID sensor automatically records and saves the data of the last card reading, so that the host computer can determine the landmark at any time.

Register address	Write value (decimal)	Content
1000	0-2	Write status: 0: The data is written successfully. 1: Data write failed or the card is locked; 2: No writable card detected
1001	0-1	Read status: 0: no card; 1: Reading status
1002	0-7	Card reading signal strength indication: 0: the weakest signal 7: The signal is strongest
1003	0-255	RFID card 1 byte data
1004	0-255	RFID card 2 byte data
1005	0-255	RFID card 3 byte data
1006	0-255	RFID card 4 byte data
1007	0-255	RFID card 5 byte data
1008	0-255	RFID card 6 byte data
1009	0-255	RFID card 7 byte data
1010	0-255	RFID card 8 byte data