1, 통신파라메타(Communication): 9600, 8, N, 1

포맷(Data Format) :헥사(Hex)

2, Function code “03H” 읽기모드

2-0, the online test (온라인 테스트)

For example: 485 mounted on a model 420MA-IN4 slave, ID is 01H, online orders can be issued for its conduct communications test .

Host message format sent: (호스트, PC 전송포맷)

Send content	Byte count	Sending data	Remark
Slave Address	1	01H	Slave Address
Function Code	1	03H	Read register
Starting register address	2	0000H	The register is used to save the parent type and subtype The register addresses in [4] District
Read register length	2	0001H	Reading a data register
CRC checksum	2	XXXXH	All previous data CRC code

This instruction can only read data in a register, read invalid.

The slave returned message format: (기기 응답포맷)

Send content	Byte count	Sending data	Remark
Slave Address	1	01H	Slave Address
Function Code	1	03H	Read register response
Return byte length	1	02H	Back to 2 bytes
Return data	2	0100H	Return data
CRC checksum	2	XXXXH	All previous data CRC code

Data returned from the machine, 01H represents the parent type, 00H representatives subtype, these two types are fixed.

2-1, reading from the machine ID(RS485 슬레이브 어드레스 읽기)

For example: the 485 bus has only one model 420MA-IN4 type from the machine, in which case you can read its issued ID command .

Host message format sent:

Send content	Byte count	Sending data	Remark
Slave Address	1	00H	Sending a command, it requires only one slave on the 485 bus
Function Code	1	03H	Read register
Starting register address	2	0064H	The register holds the device station number (ID number) The register addresses in [4] District
Read register length	2	0001H	Reading a data register
CRC checksum	2	XXXXH	All previous data CRC code

The slave returned message format:

Send content	Byte count	Sending data	Remark
Slave Address	1	00H	Sending address , it requires only one 485 slaves on the bus
Function Code	1	03H	Read register response
Return byte length	1	02H	Back to 2 bytes
Return data	2	00XXH	Return 00 + ID number from the current machine
CRC checksum	2	XXXXH	All previous data CRC code

2-3, the device reads the input current value (AD 입력값 읽기)

For example: 485 mounted on a model 420MA-IN4 type slave, ID is 01H, a total of four current input channels, read all four channel current data.

Host message format sent:

Send content	Byte count	Sending data	Remark
Slave Address	1	01H	No. 01 slaves
Function Code	1	03H	Read register
Starting register address	2	012CH	012CH - save the register input channel 0 current value 012DH - The register holds the current value of the input channels 1 012EH - 2 current value stored in the register input channel 012FH - 3 current value stored in the register input channel The register addresses in [4] District
Read register length	2	0004H	4 reads the data registers
CRC checksum	2	XXXXH	All previous data CRC checksum

Description: Slave from 0 channel, beginning with the host asked to return to the words, the order of the input current of each channel to upload data

The slave returned message format:

Send content	Byte count	Sending data	Remark
Slave Address	1	01H	No. 01 slaves
Function Code	1	03H	Read register
Return byte length	1	08H	Returns the current data byte 8
Return data	8	21E6H 3B94H 0000H 0000H	0 channel, 8.678mA 1 channel, 15.252mA 2 channels, 0mA 3-channel, 0mA
CRC checksum	2	XXXXH	All previous data CRC checksum

Return Data Format Description: Each word of each channel is a two-byte signed integer, converted into the base 10, exactly 1000 times the actual current value.

3, Function code "06H" 쓰기모드

3-1, configure the slave ID (RS485 어드레스 지정)

For example: the 485 bus has only one 420MA-IN4 type from the machine, in which case you can configure the ID command issued them.

Host message format sent:

Send content	Byte count	Sending data	Remark
Slave Address	1	00 H	Bulk order, it requires only one slave on the 485 bus
Function Code	1	06H	Write register
Starting register address	2	0064H	The register holds the slave ID number (station number) The register addresses in [4] District
Write data	2	00XXH	Write 00 + ID number from the current machine, the actual first two bytes are valid
CRC checksum	2	XXXXH	All previous data CRC code

The slave returned message format:

Send content	Byte count	Sending data	Remark
Slave Address	1	00H	Sending address , it requires only one 485 slaves on the bus
Function Code	1	06H	Write register
Starting register address	2	0064H	Register address 0064H: saved from the machine ID
Save the data word length	2	00XXH	Original return written above a word (2 bytes)
CRC checksum	2	XXXXH	All previous data CRC code