

The instrument communication protocol complies with the Modbus-RTU communication protocol, with 1 start bit, 8 data bits and 1 stop bit.

The following instruction definition assumes that the instrument parameters are: The meter address is set to 1、communication baud rate 9600, no effect, 1 decimal point, unit MPa, instrument display value 500.0MPa..In the instruction, the address and data in the read instruction and write instruction are the high byte before and the low byte after.CRC checks that the low byte is first and the high byte is second.

【 Read the pressure value 】

Command: 01 03 00 00 04 01 C5 CB

instruction: 01 (address) instrument 03 (read command) 00 00 04 (pressure value register address) 01 (read) a parameter C5 CB (CRC16 efficacy yards)

response: 01 03 02 13 88 B5 12

instruction: 01 (address) instrument 03 (read command) 02 (number of bytes to read. One parameters for 2, 2, 4,...)13 88 (13 88 is a hexadecimal number 13 is a high byte 88 is a low byte converted to a decimal number exactly 5000) B5 12 (CRC16 effect code)

【 Zero drift adjustment 】

Command: 01 06 00 05 00 01 58 0B

instruction description: 01 (instrument address) 06 (write instruction) 00 05 (instrument communication address) 00 01 (zero drift adjustment code) 58 0B (CRC16 effect code)

Response: 01 06 00 05 00 01 58 0B

instruction Description: 01 (instrument address) 06 (writing instruction) 00 05 (instrument communication address) 00 01 (zero drift adjustment code) 58 0B (CRC16 effect code)

【 Read parameter value 】

command: 01 03 XX XX 00 01 CRC1 CRC2

instruction description: 01 (instrument address) 03 (read command) XX XX (parameter address: see table 2) 00 01 (read a parameter) CRC1 CRC2 (CRC16 effect code: low byte in front, high byte in back)

response: 01 03 02 XX XX CRC1 CRC2

instruction description:01 (meter address) 03 (read command) 02 (number of bytes read, 1 parameter for 2,2 parameters for 4....)(returned parameter value: high in front, low in back) CRC1 CRC2 (CRC16 effect code: low byte in front, high byte in back)

【 Write parameter value 】

command: 01 06 XX XX DATA1 DATA2 CRC1 CRC2

instruction: 01 (instrument address) 03 (read command) XX XX (parameter address: see table 2) DATA1 DATA2 (write parameter: high byte first, low byte last.See Table 2) CRC1 CRC2 (CRC16 code: low byte before, high byte after)

Response: 01 06 XX XX DATA1 DATA2 CRC1 CRC2

instruction Description: 01 (instrument address) 03 (read command) XX XX (parameter address)

DATA1 DATA2 (written parameters: high byte before, low byte after) See Table 2) CRC1 CRC2
(CRC16 validation code: low byte before, high byte after)

Table 2: Parameter addresses and data

Parameter	Content	Address (Hex)	Data (data1, data2)
Addr	Variable feeding board address	00 00	1~255
baud	Variable baud rate of feed plate	00 01	1-2400 2-4800 3-9600 4-19200
Unit	Unit of measure	00 02	0-m 1-kPa 2-MPa 3-°C 4-L 5-bar 6-psi 7 Pa
Dot	Number of decimal places of measurement data	00 03	Value range: 0-4
Parity	Parity bit	00 06	0-None 1-Odd 2-Even
Loc	Password authentication	00 0A	Password: 38 79

① Password validation, password 38 79H, that is, send command: 01 06 00 0A 38 79 7B EA ②
write to need to change the parameter, for example, change the feed board address to 2,
command: 01 06 00 00 00 02 08 0B

Note: When writing parameters, password authentication only needs to be done once. In the case of constant power, other parameters can be modified without authentication again. After the power is cut off, the parameter can be changed only after re-authentication.