

Communication Protocol

The communication protocol of this instrument complies with the MODBUS-RTU communication protocol, with 1 start bit, 8 data bits, and one stop bit.

The following command definition assumes that the instrument parameters are: the instrument address is set to 1, the communication baud rate is 9600, the invalid check digit, the decimal point is 1 digit, the unit is MPa, and the instrument display value is 500.0MPa. The address and data in the read command and write command are all high byte first and low byte last; CRC check low byte first, high byte last.

【Read pressure value】

Command: 01 03 00 04 00 01 C5 CB

Instruction description: 01 (meter address) 03 (read command) 00 04 (pressure value register address) 00 01 (read a parameter) C5 CB (CRC16 verification code)

Response: 01 03 02 13 88 B5 12

Instruction description: 01 (meter address) 03 (read command) 02 (number of bytes read, 1 parameter is 2, 2 parameters are 4....) 13 88 (13 88 is the hexadecimal number 13 is The high byte 88 is the low byte converted to decimal, which is exactly 5000) B5 12 (CRC16 verification code)

【Zero drift adjustment】

Command: 01 06 00 05 00 01 58 0B

Instruction description: 01 (meter address) 06 (write command) 00 05 (meter communication address) 00 01 (Zero drift adjustment code) 58 0B (CRC16 verification code)

Response: 01 06 00 05 00 01 58 0B

Instruction description: 01 (meter address) 06 (write command) 00 05 (meter communication address) 00 01 (Zero drift adjustment code) 58 0B (CRC16 verification code)

【Read parameter value】

Command: 01 03 XX XX 00 01 CRC1 CRC2

Instruction description: 01 (meter address) 03 (read command) XX XX (parameter address: see Table 2) 00 01 (read a parameter) CRC1 CRC2 (CRC16 verification code: low byte first, high byte last)

Response: 01 03 02 XX XX CRC1 CRC2

Instruction description: 01 (meter address) 03 (read command) 02 (number of bytes read, 1 parameter is 2, 2 parameters are 4....) XX XX (returned parameter value: high order first, Low order after) CRC1 CRC2 (CRC16 verification code: low byte first, high byte after)

【Write parameter value】

Command: 01 06 XX XX data1 data2 CRC1 CRC2

Instruction description: 01 (meter address) 06 (read command) XX XX (parameter address: see Table 3) data1 data2 (written parameters: high byte first, low byte last. See Table 3) CRC1 CRC2 (CRC16 verification code: low byte first, high byte after)

Response: 01 06 XX XX data1 data2 CRC1 CRC2

Instruction description: 01 (meter address) 06 (read command) XX XX (parameter address) data1 data2 (Writing parameters: high byte first, low byte last. See Table 7) CRC1 CRC2 (CRC16 verification code: low byte first, high byte last)

Details	Function code	Address (Hex)	Data (data1, data2)
Transmitter board address	03H 06H	00 00	1~255
Transmitter board baud rate	03H 06H	00 01	1-2400 2-4800 3-9600 4-19200
Units	03H 06H	00 02	0-M 1-kPa 2-MPa 3-℃ 4-L 5-bar 6-psi 7-Pa
Number of decimal places	03H 06H	00 03	Range: 0-4
Measurement output value	03H	00 04	-32768~32767
Check digit	03H	00 06	0-None 1-Odd 2--Even

Note:

(1)The unit of measurement and the number of decimal places only represent symbols, and there is no automatic conversion and conversion function. If necessary, please contact us to return to the factory for debugging.

(2)The check digit can be modified through the client software by contacting our technical staff.