

MODBUS Communication Protocol

1. Read data:

S:

	Functional code				register numbers		
	01	03	<u>00</u>	<u>01</u>	<u>00</u>	<u>02</u>	<u>CRCL CRCH</u>
Meter address				register address			16 bits CRC check

R:

	Function code						
	01	03	04	<u>00 00</u>	<u>00 0D</u>	<u>CRCL CRCH</u>	
Meter address			bytes numbers	(energy is 13)	(BCD)	16 bits CRC check	

2. Write address:

S:

	Function code				register numbers		New address		
	01	10	<u>00</u>	<u>00</u>	<u>00</u>	<u>01</u>	02	<u>00</u>	<u>01 CRCL CRCH</u>
Meter address				register address			bytes numbers		16 bits CRC check

R:

	Function code				register numbers		
	01	10	<u>00</u>	<u>00</u>	<u>00</u>	<u>01</u>	<u>CRCL CRCH</u>
Meter address				register address			16 bits CRC check

3. Write base:

S:

	Function code				register numbers		data		
	01	10	<u>00</u>	<u>03</u>	<u>00</u>	<u>02</u>	04	<u>00 BC 6E 4E</u>	<u>CRCL CRCH</u>
Meter address			register address	bytes numbers	(energy is 12345678)	(BCD)	16 bits CRC		check

R:

	Function code				register numbers		
	01	10	<u>00</u>	<u>03</u>	<u>00</u>	<u>02</u>	<u>CRCL CRCH</u>
Meter address			register address				16 bits CRC check

Write Password

S: 01 10 00 1E 00 02 04 12 34 56 78 CRCL CRCH

R: 00 10 00 1E 00 02 CRCL CRCH

Password Check

S: 01 10 00 20 00 03 06 12 34 56 78 00 01 CRCL CRCH

R: 01 10 00 20 00 03 CRCL CRCH

00 01 stand for write data enabled while 0000 stand for write data disabled

Baud rate: 4800, 8 data bits, evencheck, 1 start bit, 1 stop bit.

0 can't be the meter address, but it can be the broadcasting address in order to read any data from the meter.