How to read data of electric energy meter by KC868-COL

1. Read power consumption:

Example:

Send:

5E 01 03 C0 08 is fixed, never change 7A 03 00 00 00 02 CE 40 is send for power meter, this is ModBus protocol 7A hex->dec is 122. 122 is power meter address ID.

Feedback:

7A 03 04 42 53 33 33 81 B8

7A hex->dec is 122. 122 is power meter address ID.
03 is Modbus function: read 04 is length of data 81 B8 is CRC code
42 53 33 33 is float , need convert to dec, 0x42533333 is 52.8 Kwh

Floating Point to Hex Converter	Emeter1
✓ Show details □ Swap endianness □ Uppercase letters in hex	Addr: 122
Hex value: 0x42533333 Convert to float	
0x42533333	52.8 kWh
4 2 5 3 3 3 3 0 1 0 0 1 0 1 0 1 1 0 0 <td>220 V</td>	220 V
0 10000100 1010011001100110011	1.2 A
sign exponent mantissa	
+1 132 1.1010011001100110011 (binary)	0.86 kW
+1 * 2^(132 - 127) * 1.649999976158142	
+1 * 32.000000 * 1.649999976158142	0.95 Q
52.8	F0.01 H-
Float value: 52.8 Convert to hex	50.01 112

2. Read power voltage:

Example:

Send:

Feedback:

7A 03 04 43 5C 00 00 E4 A2

43 5C 00 00 is float , need convert to dec, 0x435C0000 is 220V

3. Read power current:

Example:

Send:

Feedback:

7A 03 04 3F 99 99 9A 07 34 3F 99 99 9A is float , need convert to dec, is 1.2A

4. Read power:

Example:

Send:

Feedback:

7A 03 04 3F 5C 28 F6 63 74 3F 5C 28 F6 is float , need convert to dec, is 0.86kw

5. Read power factor:

Example:

Send:

Feedback:

7A 03 04 3F 73 33 33 98 1E 3F 73 33 33 is float , need convert to dec, is 0.95Q

6. Read power frequency:

Example:

Send:

Feedback:

7A 03 04 42 48 0A 3D 62 2B 42 48 0A 3D is float , need convert to dec, is 50.01Hz