

# **HH MODBUS USER INSTRUCTIONS**

## 1, RS485 communication

| start bi | data bit | stop bit | Parity check | Baud Rate  |
|----------|----------|----------|--------------|------------|
| 1        | 8        | 1        | No           | 9600Bit/ S |

2, The format of the data reading and writing is same as standard Modbus protocol. Definition as follows:

Request: (eg:send order to read PV101 03 00 63 00 02 95 D5)

|     |     |             |        |      |
|-----|-----|-------------|--------|------|
| 01  | 03  | 0099(0063H) | 0002   | C415 |
| ADD | COM | PV1         | Counts | CRC  |

Response: (eg:01 03 04 00 00 4F 00 CE 03)

|     |     |        |             |       |
|-----|-----|--------|-------------|-------|
| 01  | 03  | 04     | 00 00 4F 00 | CE 03 |
| ADD | COM | Counts | PV1         | CRC   |

Response data: 00 00 4F 00

From high to low, take 3 bytes. In this example, we take 00 00 4F

INT 00 00 4FHEX=75, if the time unit is Sec., the display value is  $75/10=7.5S$

If the time unit is Min/Hour, the display value is  $75/100=0.75M/H$

Another example:

Response data: 01030400 01060169 93,

We take 00 01 06 01. From high to low, take 3 bytes. In this example, we take 00 01 06,

INT 0106HEX=262, if the time unit is Sec., the display value is  $262/10=26.2S$

If the time unit is Min/Hour, the display value is  $262/100=2.62M/H$

## 4, Commands:

03H: read holding registers parameters

06H: write single holding register parameter value

10H: write multi holding registers parameters value

RESET to 0: when single byte write PV12,the timer reset.eg. 01 06 00 64 00 00 C8 15

HH meter reading and writing parameter

| Factory setting | Parameters | Start address (HEX) | Counts | Function                    | Remark    |
|-----------------|------------|---------------------|--------|-----------------------------|-----------|
|                 | PV1        | 0098                | 1      | Time INT, unit:0.1s         | Read only |
|                 | PV11       | 0099                |        |                             |           |
|                 | PV12       | 0100                |        |                             |           |
| 01              | ADD        | 0024                | 1      | Communication 1-247         | R / W     |
|                 | TIM        | 0004                | 2      | Time preset value,unit:sec. |           |
|                 | AL1        | 0012                | 2      | Ampere preset value         |           |
|                 | HY2        | 0016                | 2      | Ampere hysteresis value     |           |
|                 | AM2        | 0019                | 1      | Timing mode,0=L.,1=H        |           |

