# LM MODBUS USER INSTRUCTIONS

1, The instrument RS485/RS232 communication BPS is fixed at 9600 bits/s, start bit=1, data bit=8, stop bit=1, starting and ending time >5ms.

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

Request:（eg：01 03 00 62 00 02 65 D5）

| 01 | 03 | 0098(0062H) | 0002 | 26069 (65D5) |
|---|---|---|---|---|
| ADD | COM | PV1 | Counts | CRC |

Response: （eg：01 03 04 6D 96 49 F3 71 66）

| 01 | 03 | 04 | 6D96 49F3 | 7166 |
|---|---|---|---|---|
| ADD | COM | Counts | PV1 | CRC |

Return Power: 2 WORD

PV1 = 6D96 49F3=6D96.49F3H= INT 6D96H+ POINT 49F3H=28054+18931/65536=28054.2888

（49F3H=18931 6D96H=28054）

When Max bit is “1”,means negative, viz. sign bit.

Ed96 bit 15=1 is negative,viz.-6D96H

3, When setting parameters, can read multi- parameters; when writing, can write 1 parameter only every time

Please convert the demical part from band 10 to 16 in HEX format.For example,100.5,INT 100=0064h,0.5=0.8000H,therefore 100.5=0064.8000H

4, Commands:

02H: read digital value / discrete I/O parameters

03H: read holding registers parameters

06H: write single holding register parameter value

10H: write multi holding registers parameters value

5, Communication parameters:

LM Weighing meter reading and writing parameter

| Factory setting | Parameters | Parameter address (HEX) | Data numbers (bytes) | Function | Remark |
|---|---|---|---|---|---|
| | PV1 | 0098 (62H) | 4 | 1st input measuring value | Read only |
| 90.0 | AL1 | 0000 | 4 | Alarm 1 set value | R / W |
| H: high alarm | AM1 | 0003 | 2 | Alarm 1 mode setting | |
| 10.0 | AL2 | 0004 | 4 | Alarm 2 set value | R / W |
| L: Low alarm | AM2 | 0007 | 2 | Alarm 2 mode setting | R / W |
| | AL3 | 0008 | 4 | Alarm 3 set value | R / W |
| | AM3 | 0011 | 2 | Alarm 3 mode setting | R / W |
| H: high alarm | HY1 | 0012 | 4 | AL1 /AL2/AL3 common hysteresis value | R / W |
| 001 | ADD | 0015 | 2 | Communication address | R / W |
| | PVF | 0016 | 4 | Offset value | R / W |
| 0.00 | USP | 0020 | 4 | Adjustment rage | R / W |
| 0001 | DP | 0023 | 2 | Decimal point | R / W |
| | UHH | 0024 | 4 | Max. Weight value | R/W |
| | TRL | 0028 | 4 | Low current output | R/W |
| | TRH | 0032 | 4 | High current output | R / W |
| 000 | LCK | 0035 | 2 | Password | R / W |

Note: any writing operation to PVF will reset, which is equal to function of RST key in the front panel and terminal RST.