

## **1. Function**

### 1.1 Result

Calculate and get ibp measurement waveform result

### 1.2 Measurement Unit

IBP      mmHg

### 1.3 Serial Port Communication

TTL Power Level , 19200 baud rate

## **2. performance index**

### 2.1 measuring range :

IBP            -10 -300 mmHg

### 2.2 resolution :

IBP            1 mmHg

### 2.3 measurement accuracy

IBP             $\pm 2\%$  or  $\pm 1$  mmHg whichever is bigger

## **3. mechanical features**

3.1 Dimension : 93×56×30mm

3.2 Weight : 100g

3.3 connection :

P2 uses 4-pin socket, which is used in conjunction with host hardware communication and

the provision of power supply, the pins are defined as follows:

PIN1 :    PIN2 :    PIN3 :    PIN4 :

## **4. electrical specification**

Input voltage : 5V DC  $\pm$  10 %

Quiescent current : < mA

Measuring current : < mA

**5. Accessories**

IBP : one time pressure sensor

Pressure sensor cable

**6. environment**

6.1 temperature

working : 0 ~ 45 °C

Storage : -20-55 °C

6.2 moisture range

working : 30~95%

Storage : 10~100%

**8 . Serial Port Communication Protocol**

**8.1 Serial COM configuration :**

data format : start bit + 8 bit data + 1bit Stop bit , No Parity Check ;

baud rate : 19200 baud

**8.2 The Data transmitted by the module to the hosting hardware :**

Transmit Data :

8.2.1 0X06 : Status Packet , 3 byte 1packet/s

byte	bit	Data meaning
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1	Lower bit	0110 , status packet mark
	4~6	unknown
	7	Sync bit , 0
2	0	1 : lbp1 fall off    0 : lbp1 not fall off
	1	1 : lbp2 fall off    0 : lbp2 not fall off
	2	unknown
	3	unknown
	4 ~ 6	unknown
	7	Sync bit , 1
3	0 ~ 6	Sync bit, 2
	7	Sync bit , 1

8.2.2 0X08 ~ 0x0E : ibp measuring data , 4 byte 128 packet/s

byte	bit	Data meaning
1	0	lbp1 measuring the 8 <sup>th</sup> bit of data
	1	lbp2 measuring the 8 <sup>th</sup> bit of data
	2	lbp2 measuring the 12 <sup>nd</sup> bit of data
	4~6	unknown
	7	Sync bit , 0
2	0~3	lbp1 measuring the 9 <sup>th</sup> -12 <sup>nd</sup> bit of data
	4~6	lbp2 measuring the 9~11 bit of data

	7	Sync bit , 1
3	0~6	lbp1 measuring the low 7 <sup>th</sup> bit of data
	7	sync , 1
4	0~6	lbp2 measuring the low 7 <sup>th</sup> bit of data
	7	Sync bit , 1

Note : lbp measuring data is waveform data , 12Bit.

lbp1=byte 2 low 4bit << 8 + Byte 1 No. 0 bit << 7 + byte 3 low 7bit

lbp2=Byte 1 No.2 bit << 9 + Byte 2 No.4-6 bit << 4 + Byte 1 No.1bit << 6 + Byte 4 low 7