Zhengzhou Winsen Electronic Technology Co., Ltd

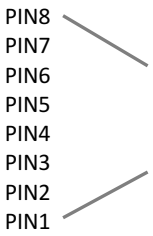
PWM

ZH03 ZH03A ZH03B

0.3 m

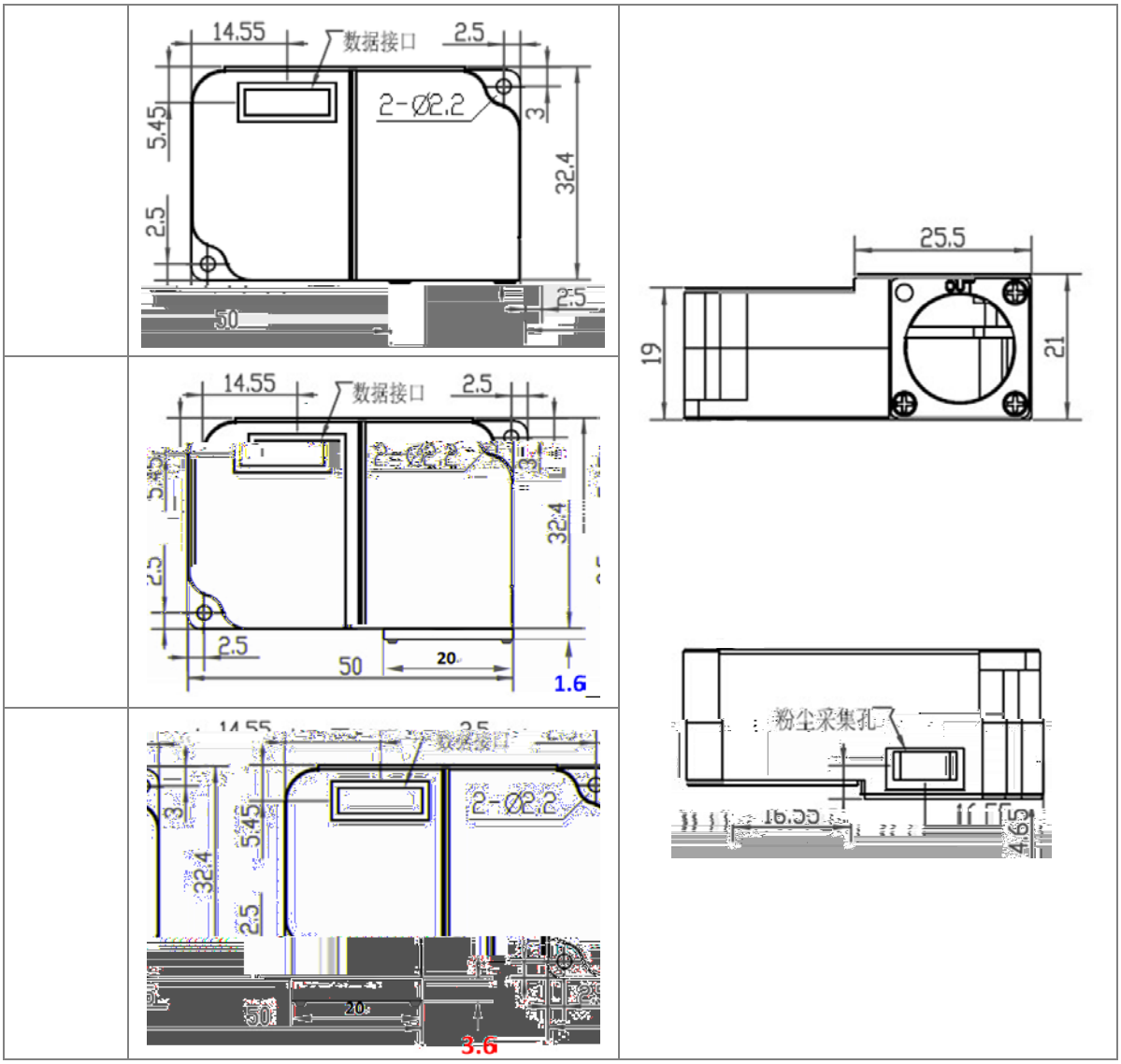
1

	ZH03/ZH03A/ZH03B
	PM1.0 PM2.5 PM10
	UART 3V
	PWM
	5V ± 0.1V
	120mA
	10mA
	T_{90} 45s
	0 80 RH
	10 50
	30 70
	3
	50×32.4×21mm(L×W×H)



2

PIN1	VDD	5V±0.1V
PIN2	GND	
PIN3		
PIN4	RXD	TTL: 0 3V
PIN5	TXD	TTL: 0 3V
PIN6		
PIN7		
PIN8	PWM	TTL: 0 3V



	9600
	8
	1

1	1		0x42
2	2		0x4D
3		8	0x00
4		8	0x14
5	1	8	
6		8	
7	2	8	
8		8	
9	3	8	
10		8	
11	4	8	PM1.0
12		8	
13	5	8	PM2.5
14		8	
15	6	8	PM10
16		8	
17	7	8	
18		8	
19	8	8	
20		8	
21	9	8	
22		8	
23		8	= 1 +……+ 22
24		8	

1. 10s PM2.5

2.

42 4D 00 14 00 54 00 6E 00 7C 00 54 00 6E 00 7C 00 00 00 00 00 00 03 1F

= 0x42+0x4D+0x00+0x14+0x00+0x54+0x00+0x6E+0x00+0x7C+0x00+0x54+0x00+0x6E+0x00

+0x7C+0x00+0x00+0x00+0x00+0x00+0x00 = 0x031F

8 0x03 23 8 0x1F 24

0	1	2	3	4	5	6	7	8
0xFF	0x01	0x86	0x00	0x00	0x00	0x00	0x00	0x79

0	1	2	3	4	5	6	7	8
		PM 2.5		PM 10		PM 1.0		
		8 (ug/m³)	8 (ug/m³)	8 (ug/m³)	8 (ug/m³)	8 (ug/m³)	8 (ug/m³)	
0xFF	0x86	0x00	0x85	0x00	0x96	0x00	0x65	0xFA

1. PM1.0 PM10 V1.41 V1.41
2.

0	1	2	3	4	5	6	7	8
0xFF	0x01	0x78	0x41	0x00	0x00	0x00	0x00	0x46

0	1	2	3	4	5	6	7	8
0xFF	0x01	0x78	0x40	0x00	0x00	0x00	0x00	0x47

0	1	2	3	4	5	6	7	8
0xFF	0x01	0xA7	0x01 0x00	0x00	0x00	0x00	0x00	0x57 0x58

0	1	2	3	4	5	6	7	8
0xFF	0xA7	0x01 0x00	0x00	0x00	0x00	0x00	0x00	0x58 0x59

1. V1.41 V1.41
2.

“ ”

= 0x86 + 0x00 + 0x47 + 0x00 + 0xC7 + 0x03 + 0x0F

= 0xA6 8

= 0x59

= 0x5A 1

```
/*****************************************************************
*          : unsigned char FucCheckSum(unsigned char *i, unsigned char ln)
*            :                                  1\2\3\4\5\6\7          +1
*            :                1-                          +1                    2
*****************************************************************/
unsigned char FucCheckSum(unsigned char *i, unsigned char ln)
{
    unsigned char j,tempq=0;
    i+=1;
    for(j=0;j<(ln-2);j++)
    {
        tempq+=*i;
        i++;
    }
    tempq=(~tempq)+1;
    return(tempq);
 }
```

PWM	
0~1000ug/m³	
PM2.5	0~1000ug/m³
	1000ms±5%
	200us( )
	1000ms±5%