

RS232 Protocol For the meter of TP9605BT

13.1 RS232 protocol total 13byte, baud rate is 2400 bps。 Data format:

Sing	Data Byte				Space	Point	SB1	SB2	SB3	SB4	BAR	EOF
1	2	3	4	5	6	7	8	9	10	11	12	13
+/-	X	X	X	X	020H	X	X	X	X	X	X	00DH

13.2 13 byte output code positions:

- | | |
|-----------------------|--------------------|
| a) Sing byte 1: 0f0H; | h) SB1 byte: 0f7H; |
| b) Data byte 2: 0f1H; | i) SB2 byte: 0f8H; |
| c) Data byte 3: 0f2H; | j) SB3 byte: 0f9H; |
| d) Data byte 4: 0f3H; | k) SB4 byte: 0fAH; |
| e) Data byte 5: 0f4H; | l) BAR byte: 0fBH; |
| f) Space byte: 0f5H; | m) EOF byte: 0fCH。 |
| g) Point byte: 0f6H; | |

13.3 Sing byte indicated the measured signal is plus signal or minus signal, and output code is ASCII code:

- | | |
|-------------------|---------------------|
| a) plus (+): 02BH | b) minus (-): 02DH。 |
|-------------------|---------------------|

13.4 Point Byte has four byte indicate the measured data, output code is ASCII code:

- | | |
|---------------------------------|--------------------------------|
| a) Date byte 2: indicate Lcd_1; | c)Date byte 4: indicate Lcd_3; |
| b) Date byte 3: indicate Lcd_2; | d)Date byte 5: indicate Lcd_4。 |

13.5 Point Byte indicate the position of decimal point,output code is 16 digit code.

- | | |
|------------------------------------------------------------------|------------------------------------------------------------------|
| a)Point 「0」 :030H indicate no decimal point, display as 「000」; | c)Point 「2」 :032H indicate no decimal point,display as 「00.00」; |
| b)Point 「1」 :031H indicate no decimal point, display as 「0.000」; | d)Point 「3」 :034H indicate no decimal point, display as 「000.0」。 |

13.6 SB1 Byte code as following (SB1), output code is 16 digit code:

State	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
0								
1	0	0	AUTO	DC	AC	REL	HOLD	BPN

13.7 SB2 Byte code as following (SB2), output code is 16 digit code :

state	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
0								
1	Z1	Z2	MAX	MIN	APO	Bat	n	Z3

13.8 SB3 Byte code as following (SB3), output code is 16 digit code:

State	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
0								
1	u	m	k	M	Beep	Diode	%	Z4

13.9 SB4 Byte code as following (SB4), output code is 16 digit code:

State	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
0								
1	V	A	Ω	hFE	Hz	F	℃	℉

13.10 Bar byte: Bit7 indicate plus and minus, Bit 0~6 indicate Bar graph Numbers,output code is 16 digit code.

13.11 RS232 Output format:

2D-30-30-30-30-20-31-B1-31-02-00-80-0D