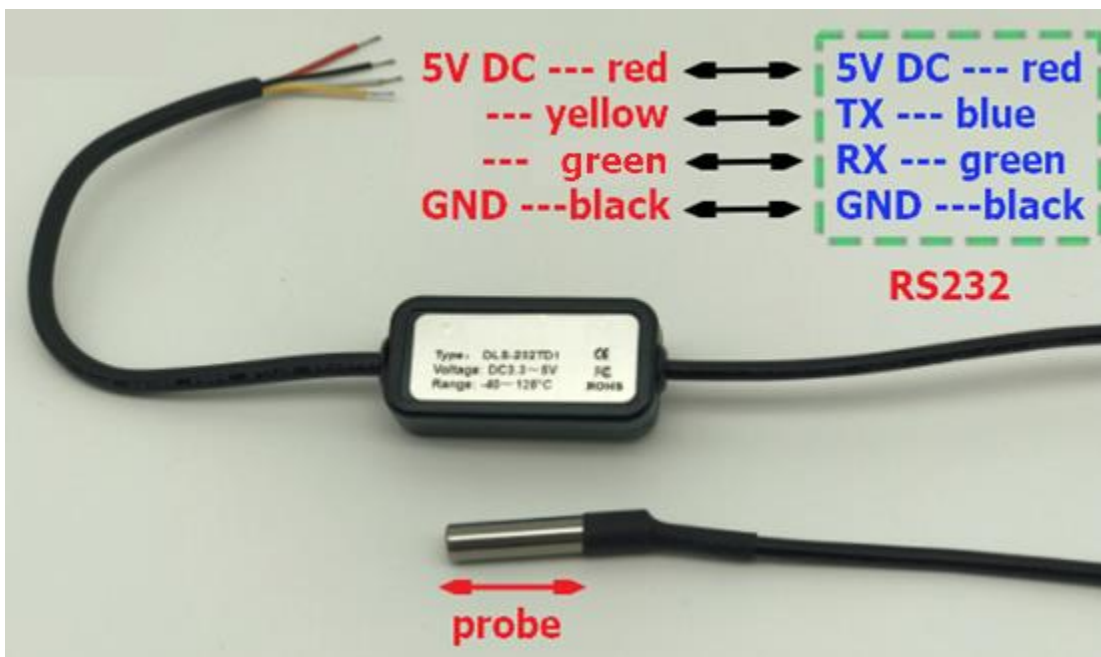


## X3 temperature sensor guide

Specification:

RS232, 9600, power: 3.3 to 5VDC, 10mA, temperature range: -40 to 125 degree centigrade

X3 can output 5VDC for temperature sensor.



Frist : Send command to X3 for enable “**WSTC,ON,2#** (means: transparent transmission mode.)”

About Temperature sensor interface and RS232 interface, check above image:

Raw data: 79 79 00 0E 9B 03 **32 38 2E 33 A1 E6 0D 0A** 02 89 BE 49 0D 0A

Packet type: plug-in module transparent transmission protocol (9B)

CRC: CRC is correct, BE49

Package length = 14 (000E)

Plug-in module encoding = unknown module type (03)

Transparent content:

32 38 2E 33 A1 E6 0D 0A

HEX: 32 38 2E 33 convert to ASCII is: 28.3 (degree centigrade)

## HEX

```
32 38 2E 33 A1 E6 0D 0A
```

## ASCII

```
28.3 ; º
```

Set up Temperature sensor parameters by GPS platform:

79 79 00 0D 9B 03 3C 03 01 66 3C 64 0D 00 D5 64 70 0D 0A (upload data per 1 minute)

If set up successfully, sensor will feedback: 3C 01 01 3C 0D

79 79 00 0C 9B 03 3C 02 01 65 5A 0D 00 D6 1E 23 0D 0A (check temperature )

Format		Length (Byte)	Description
Start Bit		2	0x79 0x79
Packet Length		2	Length = Protocol Number + Information Content + Information Serial Number + Error Check
Protocol Number		1	0x9B
Info Content	External device type code	1	It is used to identify the external device type. Data transferred by different types of device has different meanings. See below.
	Transparent content	N	Date from external device by RS232 port
Information Serial Number		2	Serial number of data sent later at each time will be automatically added '1'.
Error Check		2	Error check (From "Packet Length" to "Information Serial Number"), are values of CRC-ITU. CRC error occur when the received information is calculated, the receiver will ignore and discard the data packet. (See Appendix 1)
Stop Bit		2	Fixed value:0x0D0x0A

下传命令: 3C 03 01 66 00 58 0D (3C 为帧头, 03 为数据长度, 01 为命令类型号 (包号), 66 为循环返回温度命令, 00 为取消自动返回温度, 58 为 BBC, 0D 为帧尾)

下传命令: 3C 03 01 66 01 59 0D (3C 为帧头, 03 为数据长度, 01 为命令类型号 (包号), 66 为循环返回温度命令, 01 为 1 秒自动返回温度, 59 为 BBC, 0D 为帧尾)

下传命令：3C 03 01 66 02 5A 0D (3C 为帧头，03 为数据长度，01 为命令类型号（包号），66 为循环返回温度命令，02 为 2 秒自动返回温度，5A 为 BBC，0D 为帧尾)

下传命令：3C 03 01 66 03 5B 0D (3C 为帧头，03 为数据长度，01 为命令类型号（包号），66 为循环返回温度命令，03 为 3 秒自动返回温度，5B 为 BBC，0D 为帧尾)

下传命令：3C 03 01 66 04 5C 0D (3C 为帧头，03 为数据长度，01 为命令类型号（包号），66 为循环返回温度命令，04 为 4 秒自动返回温度，5C 为 BBC，0D 为帧尾)

下传命令：3C 03 01 66 05 5D 0D (3C 为帧头，03 为数据长度，01 为命令类型号（包号），66 为循环返回温度命令，05 为 5 秒自动返回温度，5D 为 BBC，0D 为帧尾)

成功返回：3C 02 01 18 27 0D (3C 为帧头，02 为数据长度，01 为命令类型号（包号）/状态，18 为温度值，27 为 BBC，0D 为帧尾)