# LoRa Sensor (TAG08/08B/08L) Configuration Manual V2.2

## 1. USB RS232 Cable



Please use the RS232 special configuration cable which is provided by our company to connect the computer to configure the sensor.

# 2. Steps

1) PL-2303 driver is for RS232 configuration cable,



Please install

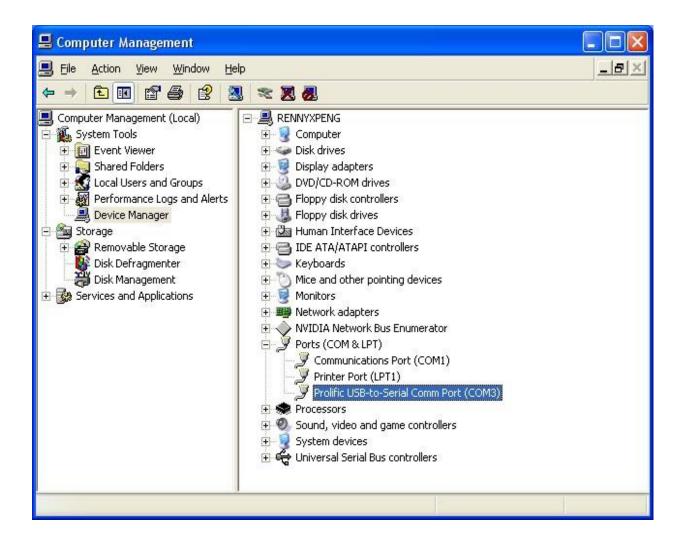
in windows systems

(XP/Vista/Win7/Win8/Win10)

- 2) Connect the configuration cable to the computer.
- 3) After the device is installed successfully, return to the desktop, select "My Computer"-> right-click -> choose "Manager"-> "System Tools" -> "Device

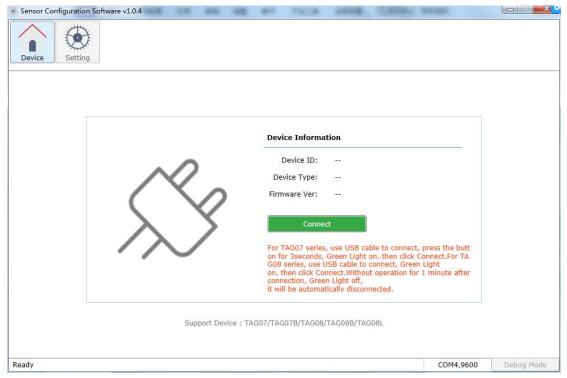
Manager" -> "Ports", and you will find the port which configuration cable is

connected. Prolific USB-to-Serial Comm Port (COM3)



## 3. Configure Software

- 1) Connect the Sensor to computer through the RS232 configuration cable.
- 2) Run the configuration software \* Sensor Configuration Software.exe



## 3) Connection

A.Confirm that the switch of the sensor is on, if it is on, connect the RS232 configuration line to the sensor and the computer until the green light is always on , and then click "Connect";

B. Confirm that the switch of the sensor is on, if it is off, please turn it to on first, wait for the light off, and then connect the RS232 configuration line to the sensor and the computer until the green light is always on and then click "Connect";

After successful connection, the following image interface will appear (If the sensor is not operated within 1 minute and the green light is off, the sensor will automatically disconnect, and you need to click "connect" again before you can continue to configure the sensor).

Sensor Configuration Software v1.0.4		100.000		
Device Setting				
	Device Informat	ion		
•	vice ID:	0000000		
	Device Type:	TAG07B(LORA)		
	leafirmware Ver:	2.13		
Lefts TEMPs Lift Samer	Disconne	ect		
	on for 3seconds, (	use USB cable to connect, p Green Light on, then click Co	nnect.For TA	
	G08 series, use U on, then click Con	SB cable to connect, Green I nect.Without operation for 1	Light	
	connection, Greer it will be automati	Light off, cally disconnected.		
Support Device : TAG	G07/TAG07B/TAG08/	TAG08B/TAG08L		
Reading device parameters			COM4,9600	Debug Mode

# 4) Setting

After successful connection, the sensor will automatically change to the setting interface:

🔹 Sensor Config	uration Software v1.0.18	<u></u>		×
Device	Setting			
	D2(Setting the interval for sending data)			
	Data sending/storage interval: 15 Minute			
	03(Setting the Temp&RH threshold)			
	Enable:			
	High temperature threshold: 100 °C Low temperature threshold: 0 °C			
	Data sending/storage interval: 1 Minute 36(Setting the buzzering alarm)			
-				
	42(Setting the Temp&RH calibration)			
	Enable: Temperature range: 0 *C			
	Other			
-	Export device log data Clear device log data Reset		_	
	Read Save			
Ready	COM3,9	600	Debug M	ode

## Setting the interval for sending data(02)

**Data sending/storage interval:** The Sensor data transmission interval X:[1,1440], Unit:Min,default:15

## Setting the Temp&RH Threshold(03)

## TAG08:

Enable: enable TAG alarm function

If sensor's temperature exceeds or falls below the upper and lower limit of the

temperature, it will give an alarm ..

**High temperature threshold:** [-55-125], unit:°C, default: 100;

Low temperature threshold: [-55-125],unit:°C,default: 0)

**Data sending/storage interval:**Time interval of temperature&humidity alarm[1-1440], unit:min, default:1

## TAG08L:

Enable: enable TAG alarm function

If sensor's temperature exceeds or falls below the upper and lower limit of the temperature, it will give an alarm.. **High temperature threshold:** [-100-70], unit:°C, default: 100; **Low temperature threshold:** [-100-70], unit:°C, default: 0) **Data sending/storage interval:**Time interval of temperature&humidity alarm[1-1440], unit:min, default:1

## TAG08B:

Enable: enable TAG alarm function If the sensor exceeds or falls below the upper and lower limits of temperature and humidity, it will give an alarm. High temperature threshold: [55-125],unit:°C, default: 100; Low temperature threshold: [-55-125], unit:°C default: 0 High humidity threshold: [0-100], unit:%, default: 100 Low humidity threshold: [0~100], unit:%, default: 0 Data sending/storage interval:Time interval of temperature&humidity alarm 1,[1-1440], unit:min, default:1

## Setting the buzzer alarm(36)

Open: enable buzzer alarm function, the alarm is called for 1 minute by default

## Setting Temp&RH calibration (42)

#### TAG08/08L:

Enable: enable temperature calibration function

#### **Temperature range:**

If the calibration value is added to the temperature, it begins with +; If the calibration value is reduction to the temperature, it begins with -; Can support to one decimal point, unit: °C

#### TAG08B:

Enable: enable temperature calibration function

#### **Temperature range:**

If the calibration value is added to the temperature, it begins with +; If the calibration value is reduction to the temperature, it begins with -; Can support to one decimal point, unit: °C

#### Humidity range:

If the calibration value is added to the humidity, it begins with +; If the calibration value is reduction to the humidity, it begins with -; Can support to one decimal point, unit: %

#### Others

Export device log data: The recorded data can be saved and exported to a CSV file via click and the data will be automatically cleared after exporting.Clear device log data: Click to delete the data recorded of the sensorReset: click and reset the sensorRead: click and read all the parameters of the sensorSave: click and save all the parameters of the sensor

#### **Debug mode**

In debugging mode, sensor parameters can be configured and sensor logs can be viewed by commands.

1) Click to enter debug mode:

🌸 Sensor Configuration Software v1.0.18 —		×
Device Setting		
02(Setting the interval for sending data)		
Data sending/storage interval: 15 Minute		
03(Setting the Temp&RH threshold)		
Enable: High temperature threshold: 100 °C Low temperature threshold: 0 °C		
Data sending/storage interval: 1 Minute 36(Setting the buzzering alarm)		
Open:  42(Setting the Temp&RH calibration)		
Enable: Temperature range: 0 *C		
Other		
Export device log data Clear device log data Reset	1	
Read Save	ł	
Ready COM3,9600	Debug Mo	ode

2) In debug mode , the sensor parameters are configured directly by commands.

Note: After writing the commands, please click "send". After sending , please write #DS to save the setting(Please refer to the command list for more detailed)..

Sensor Configuration Software v1.0.6	Carlor C C X	A ST AND AND AN AND AN	CORRECT AND INC.	
Device Setting				
Debug Mode	Log file address:	F:\小林\TAG07\配置软件\新版本配置软件\V1.0.	.6\Sensor Configur	ation Software <u>v</u> 1.
*02,1# СМD:2 Рег:1 СМD ОК *02,1# СМD:2 Рег:1 СМD ОК				
Commands *02,1#		Sending		* Pause
Ready			COM4,9600	Exit debug mode

Sensor Configuration Software v1.0.6			X
Device Setting			
Debug Mode	Log file address:	F:\/\\林\TAG07\配置软件\新版本配置软件\V1.0.6\Sensor Configuration Softwarey	1.
CMD OK			*
*02,1#			
CMD:2			
Per:1			
СМД ОК			
Save			
СМД ОК			
Commands #DS		Sending Pause	•
Ready		COM4,9600 Exit debug mo	de

#### 3) View the sensor log in debug mode

After 1 minute, the sensor will exit the configuration mode and enter the sensor log mode. Machine data can be viewed, and log reports are stored in the log file.

Sensor Configuration Software v1.0.6	
Device Setting	
Debug Mode Log file addre	ss: F:\小林\TAG07\配置软件\新版本配置软件\V1.0.6\Sensor Configuration Softwarey1.
TX:7A 00 00 00 00 38 D1 01 9E 01 45 68 03 15 01 07 0B 25 29	
Tx Done	
	<u></u>
sx127x RX??F0 00 00 00 00 FE 31 1F	
RSSI??-55 49	
D3 6A D3 6A	
Out Queue!!	
1 00 08 23 80 00 08 23 40	
00000000_2021/01/07 11:37:42_38_41.4C_32.5%_3.59V	
TX:7A 00 00 00 00 38 D1 01 9E 01 45 68 03 15 01 07 0B 25 2A	
Tx Done	
sx127x RX??F0 00 00 00 00 FE 31 1F	
RSSI??-44 49	
	*
Commands #DQ	Sending
Ready	COM4,9600 Exit debug mode

#### 4) Click to exit debug mode

Click to exit debugging mode to return to the home page, If the sensor green light is off, it is necessary to click "disconnect" and insert the RS232 configuration cable again.Click the connect when the green light is always on.

Sensor Configuration	n Software v1.0.6	A ST AND AND AND AND AND	
Device Setting			
Debug Mode	Log file address:	F:\小林\TAG07\配置软件\新版本配置软件\V1.0.6\Sensor Configu	ration Software <u>v</u> 1.
sx127x RX??F0 00 00	00 00 FE 31 1F		*
RSSI??-55 49			
D3 6A D3 6A			
Out Queue!!			
1 00 08 23 80 00 08	23 40		
00000000_2021/01/0	07 11:37:42_38_41.4C_32.5%_3.59V		
TX:7A 00 00 00 00 38	3 D1 01 9E 01 45 68 03 15 01 07 0B 25 2A		
Tx Done			
sx127x RX??F0 00 00 RSSI??-44 49	00 00 FE 31 1F		
Temp:41.4C			
Rh:32.5%		S	
Commands	#DQ	Sending	Pause
Ready		COM4,9600	Exit debug mode

Note: The sensor can only be configured when the green light is always on. The sensor cannot be configured after the green light is off.

## DFU

can use the configuration software to upgrade the device firmware



1) Select the bin file and click "Start".

#### 2) Firmware upgrade

Device Firmware Upgrade

ensor Configur	ration Software VI.L.				
	H4	JU	_		>
evice Set		Exit			
		Device Firmware Upgrade			
		Derree Finnare opgrade			
	Upgrade File:	C:\Users\lisa\Downloads\tag08B_TR78M_LoRa_Standard_V2.16.bin			
		66%			
	Tips:Don't close th restart before conr	e program or disconnect the device during the upgrade. After the upgrade is complete, wait for the device to necting to it.			
e Firmware Upg	grade	COM3,115200	D	ebug Mo	od
evice fir	rmware upgi	rade successfully.			
ensor Configur	ration Software v1.1.	30	<u> 1997</u>		
ensor Configur	ration Software v1.1.	.30	1 <u>122</u>		
	ration Software v1.1.	.30 Exit	3 <u>10</u>		
		Exit			
		Tips       X         Image: Device firmware upgrade successfully!			
		Tips       X         C:Users\lisa       Device firmware upgrade successfully!			
		Exit         Tips         C:Users\lisa         Device firmware upgrade successfully!         Start			
	Upgrade File:	Tips         C:\Users\Isa         Device firmware upgrade successfully!         Start         Itage         100%			
	Upgrade File:	Tips         C:Users\lisa         Device firmware upgrade successfully!         Start         100%			
	Upgrade File:	Tips         C:Users\lisa         Device firmware upgrade successfully!         Start         100%			
	Upgrade File:	Tips         C:Users\lisa         Device firmware upgrade successfully!         Start         100%			

4) If the device cannot be connected or upgraded due to any abnormal operation during the upgrade, please contact us.

COM3,115200

Debug Mode