

USER MANUAL SMART REMOTE WIRELESS SENSOR

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MAC Sensor Co.,LTD.



MZW2600 Series 4G-GPRS/LoRa Instruction Manual

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1. Product introduction

1.1 Product type and model

The IOT pressure and temperature level monitoring terminal (hereinafter referred to as the IOT monitoring terminal) is a smart instrument with low power consumption and wireless communication power consumption. Based on the mature Cloud platform and mobile client wireless transmission. This product can set parameters such as pressure / temperature unit, range zero / range full scale, high / low alarm value, fluctuation threshold, upload time and other parameters via USB on the terminal. It can also remotely customize the acquisition frequency through the cloud platform and view real-time data online, the historical data allowing customer to accurately and timely grasp on-site information.

The meter uses a large-capacity lithium battery to provide a stable and reliable power supply for the product, enabling it to operate safely for more than 6 years (uploaded once an hour). The self-developed low-power system can not only provide users with on-site data through the LCD screen, but also upload data through the wireless module, and even graft the data to the user's own cloud platform. The powerful control algorithm enables the instrument to have signal breaks, Transmission, working mode automatic switching, pressure fluctuation real-time alarm, one-click wake-up and other practical functions.

Range	Pressure Range: -1-11000Bar optional Temperature Range: Normal: -200~200°C; Split Type: -200~860°C; Others by customized. Level Range:0-1m50m level by customized
Working power	DC 3.6V, 19Ah Li-Battery
Battery Life	5 years (send data once an hour)
Power consumption	Standby current≤80uA; Average data sending current≤150mA
Display	Segment code LCD screen and 5 digits measurement data display
Network format	GPRS/3G/4G/LoRa/LoRaWAN
Antenna format	External antenna
Sampling interval	1 time/min
Data upload interval	5min, 10min, 30min, 60min, 360min, 720min, 1440min The interval can be selected and set. The listed above is partial, and the intervals available is 2min-1440min. Note: The actual upload interval may slightly vary from the set interval. If it fails to upload currently, it will reupload next time.
Configuration method	USB configuration operation, server remote configuration
Wake mode	Button, timing

1.2. Basic parameters and customizable parameters

Upload information	Pressure (temperature, level), battery level, signal, date and time, card number, etc.
Operating Temperature	-30 $^\circ C$ ~ 70 $^\circ C$ (the medium does not crystallize)
measurement accuracy	0.5% F.S
Temperature effect	0.015%F.S/℃
Protection class	Waterproof IP66;
	Explosion-proof: IP68, explosion-proof class(Ex ia IIC T6 Ga)

1.3. Product dimensions







Pressure sensor, model No. MZW2601



Temperature sensor, model No. MZW2602





2. Parameters customized orders needed

2.1.Before ordering, the following parameters are needed:

Range	customized
Wireless Type	customized
Network operating frequency (LORA terminal only)	customized
Process Port (connection)	customized
Temperature Probe Length (Temperature terminal only)	customized
Level Cable Length (level terminal only)	customized

3. Basic steps and precautions when using

- 3.1. First, after receiving the product, unscrew the front cover, use a flat knife to loosen the four screws around the LCD screen. Check the SIM card slot on the back of the PCBA board. Before removing and replacing the card, disconnect the lithium battery and the PCBA circuit board plug-in (power off), and then slide the SIM card buckle with your finger.
- 3.2. Secondly, purchase a 2/3/4G SIM Flow card for gauge. Please refer to the SIM card slot size of the device when purchasing.
- 3.3. Thirdly, install the SIM card, lock the buckle, and then insert the battery power and restore the screen to install and tighten the front cover.
- 3.4. Fourthly, observe whether the data displayed on the LCD screen, including battery power, signal strength, pressure value or liquid level value, temperature value (measured by non-medium temperature, only the room temperature inside the device), time and date, are displayed normally.
- 3.5. Fifthly, install the equipment directly. If the equipment is installed outdoors, it is recommended to add an instrument box for shielding protection.
- 3.6. Finally, check the following cloud platform operation guide for configuring device parameters.

3.7. If you want use yourself server and platform, please see point 5 and pages 15.

4. How to use cloud platform and cost introduction

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4.1. Cloud platform login: Cloud platform URL: <u>http://www.MACSENSOR-iot.com.</u>Use the account and password provided by MACSENSOR to enter the cloud platform, as shown below:

藍控中心				1	C and	Ø 154+	x 🌚
iansid Q	Explosion-Proof Pressure Tran	smitter A 序列号: 7YQ2MK90U7M8OY41			1		00
所有设备 报警 11 南线 0	Presure -A ID:643970	□ 已连接 更新时间 2020/05/15 13:06:55	-1.1 Psi 🛩		0,5584	实时曲线⊙	历史撤调
Explosion-Proof Pressure Transmitter A	Temperature -A ID:643971	早已连接 更新时间-2020/05/15 13:06:55	24.9 🧠 🛩	Click here and select	报暂记录中	实时曲线⊙	历史重调
Explosion-Proof Pressure Transmitter B	Explosion-Proof Pressure Tran	ismitter B 序列号: 3JTYYGB0FFZ2RQT2		language: ENGLISH		E	300
Standard Pressure and Temp Gauge A	Pressure -1 ID:644338	♀ 已连接 更新时间 2020/05/15 12:37:34	1.9 Psi 🛩		投發记录口	实时曲线⊙	历史查询
	Temperature -1 ID:644339	早日连接 更新时间:2020/05/15 12:37:34	24.4 °C 🛩		板製活業の	实时曲线⊙	历史查询
	Standard Pressure and Temp G	Sauge A 序列号: 952W29MPOI0CBNAR				6	3 © C
	Pressure 1 ID:645889	□ 已连接 更新时间 2020/05/15 12:40:55	0.0000 KPa 🛩		报警记录口	实时曲线⊙	历史查询
	Temp 1 ID:645890	□ 已连接 更新时间:2020/05/15 12:40:55	0.0 °c 🛩		报警记录中	实时曲线⊙	历史查询

After converted to English interface display, move the mouse to the left to jump out of the navigation bar, as shown below:

Monitoring Center	name /ID Q	Explosion	-Proof Pressure Tran	nsmitter A Serial Number: 7YQ2MK90U7M80Y41	
Device Management Equipment Map	m 🚺 Unline 🖸		resure -A D:643970	Connected Updated:2020/05/15 15:06:55	-1.1 Psi 🛩
Trigger	1 Pressure Transmitter A		emperature -A D:643971	Connected Updated 2020/05/15 15:06:55	25.3 ∘c ←
Cloud Configuration	Pressure Transmitter B	Explosion	n-Proof Pressure Trar	smitter B Serial Number 3JTYYGB0EE728012	
Flow Card	ure and Temp Gauge A				
Timing Task	0/0		ressure -1 D:644338	Connected Updated:2020/05/15 14:37:34	2.7 Psi 🛩
Data Downloading	0/0	1 1	emperature -1	☐ Connected	24.8 °C 🛩

Customers can group devices in the corresponding column of the navigation bar and configure the necessary parameters, such as device name / display decimal point / device data upload cycle / cloud platform device offline delay (usually set to the device data upload cycle time 3 times longer) / download historical data, etc.

4.2. Device grouping: Customers can create device grouping and classify device grouping under the device management module in the navigation bar, as shown in the following figure:

0	Device Management	New device group	
	Device List	默认组 🖉 🗵	
♀ ♣	Add Device	Explosion-Proof Pressure Tra SN:7YQ2MK90U7M8OY41 ID: 65983	Date Created:2020-04-21 15:30:14
•		Explosion-Proof Pressure Tra SN:3JTYYGB0FFZ2RQT2 ID: 66005	Date Created:2020-04-21 18:06:53
©		SN:952W29MPOI0CBNAR	Date Created:2020-04-23 11:57:40

	Console 🗘 🛱 简体中文
	All Equipment V All device grou V Device name / ID
Date Created:2020-04-21 15:30:14	Delete Device Setup Connection Editing Equipment
Date Created:2020-04-21 18:06:53	Delete Device Setup Connection Editing Equipment
Date Created:2020-04-23 11:57:40	Delete Device Setup Connection Editing Equipment

Selection Group

Device	默认组	A	K					
(默认组							
Device	Mexico-USA							
Link	relecom Cove		0					
Dropping	Custom 👻	9000	?					
Sensor	Append	Batch Addition						
	Presure -A	Numerical Type 🔍	1 (decimal places)	Psi	0	\bigcirc	Delete	7
	Presure -A	Numerical Type	1 (decimal places)	Psi ∘C	0	_ Ø	Delet	e)

Save Configuration



4.3. Setting parameter configuration, alarm setting, data analysis and processing

4.3.1. Customers can edit each device in the device management module under the navigation bar. On the device editing page, there are product name modification, group adjustment, cloud platform device offline delay time setting, sensor addition, and device installation location information establishment, etc.

When setting, it should be noted that the delay time of the cloud platform device offline usually should be set to three times the interval of uploading data between devices, which is the best. You can also add and delete devices on the device management page.

4.3.2. The connection settings on this page usually do not need to be changed (except for the time period for device data reporting). Before the device leaves the factory, the factory will configure the communication information parameters. The following is the entry into the device data collection interval time setting, as shown in the figure:



Device List Explosion-Proof Pressure Tis Senal Number 3JTVYGB0FF All Sensors	Parameter Setting Parameter FH FL TH TL TL	Current Value 400.000 0.000 70.9 -20.0	- ⊡ × Operation ⊡ ⊡		
Explosion-Proof Pressure Tr Senal Number 3JTYYGB0FF All Sensors	Parameter FH FL TH TL	Current Value 4500.000 0.000 70.0 -20.0	Operation		
Senal Number 3JTYYGB0FF All Sensors	FH FL TH TL	4800.000 0.000 70.0 -20.0	8		
Serial Number 3JTVYG80FF	я. тн т.	0.000 70.0 -20.0	8		
Serial Number 3JTYYGB0FF All Sensors	FL TH TL	0.000 70.0 -20.0	6 6		
All Sensors	тн	-20.0	Û		
	ΤL	-20.0	*		
	AT	60	÷		
	FT	2.000	Đ		
	FB	0.080			
	тв	1.0	÷		
Setting Parameters Read					
Link Protocol-Generating Example					Upload Time Generating Example
JavaScript 01. //示例化码 02. { "t":"20190605115200", //t開題:201906 04. "m"11, //aRead write identification					
	Setting Parameters Rest Link Protocol-Generating Example ////////////////////////////////////	Stating Parameters To Link Protocol-Generating Example Example JavaScrapt ////#RP/05 0. ***/>**/>**/>***/********************	TB 10 deting Parameter Read Link Protocol-Generating Example Aux/Script 01. //SWRGH	Skilling Flavationer Rext Link Protocol-Generating Example Image: Comparison of the state of t	Stituing Faramation TB 10 Image: Control of the state of the

FH: the upper limit of pressure or liquid level range;

FL: the lower limit of pressure or liquid level range;

- TH: the upper limit of the temperature range;
- TL: the lower limit of the temperature range;
- AT: the interval between sensor data reporting (minimum 3 minutes, maximum 1440 minutes)
- FT: Floating value alarm;
- FB: Pressure or liquid level alarm recovery difference;
- TB: Temperature alarm recovery difference

4.3.3. Alarm trigger configuration

Customers can set high and low alarm values for devices and sensors in the trigger module under the navigation bar.

All Triggers	r All trigger States 👻 Add Trigger Alarm Record		Search by dev 👻 Device Name
Explosion-Proof P	ressure Transmitter A		
Tempera	ture -A		
Conditions:Temp	perature -A如果数值高于23	On O Contacts { Ken~ Wwchat	Edit Delete
Conditions:Tem	If the value nigher than 23 perature -A如果数值低于15	() (∲) Contacts Ken~ WeChat	Edit Delete
	If the value lower than 15		
Trigger	Equipment Explosion-Proof Pressure Transmit	rA v	
Add Trigger	Sensor Temperature -A	*	
Alarm Record			
	Trigger Condition		
	Trigger Condition C	nditional Rules Whether Alarm information Operation to open template 🕧	
	Value higher than x	3 Ox System default alarm me: * Delete	
	New Conditions		H
	Allow Contrast		
	Palan Consta		I
	warm Mode WeChat	Ŧ	1
	Ken~ Short Mest_je	ice 🗹 WeChat 🗌 Mailbox	I
	Linkage and forwarding)
	Whether to forward No	Ψ.	· · · · · · · · · · · · · · · · · · ·

SMS alarm, e-mail alarm, WeChat alarm, voice alarm are optional (SMS / Voice alarm need to pay the operator fee)

4.3.4. Data viewing, analysis and processing

Customers can intuitively read the values and alarms of each device and sensor on the device monitoring interface. On the right side of the device, there is a historical data curve viewing function. The customer can freely set the historical data viewing time range, and can also view the historical data table, as shown below:

xplosi	ion-Proof Pressure Tran	smitter A Serial Number: 7YQ2MK90U7M8OY41			B (0) B
\geq	Presure -A ID:643970		-1.1 Psi 🛩	AlmQ	RT Curve⊙ Hist Query-
1	Temperature -A ID:643971	Connected Updated:2020/05/15 18:06:55	25.1 °c 🛩	AlmQ	RT Curve⊙ (Hist Query-
Explosi	ion-Proof Pressure Tran	smitter B Serial Number: 3JTYYGB0FFZ2RQT2			5 © 2
ð	Pressure -1 ID:644338	Connected Updated:2020/05/15 18:37:34	1.9 Psi 🛩	AlmQ	RT Curve Hist Query
n	Temperature -1	- Connected	24.1	AlmO	PT Cupres Hist Ouenu

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Lal Data		- 2 >	
nsor Information	Historical Data Data Statistics	2020-05-15 18:00:51 - 2020-05-15 19:00:51 🔍	
	Data	Update Time	
Subordinate Equipment: Explosion-Proof Pr	-1.1	2020-05-15 18:06:55	
Sensor Type Numerical Type			
Current State Connected			
Current Value -1.1Psi			
Update Time 2020-05-15 18:06:55			
	10 Article/Page 🔻	Total 1 Article < 1 > To 1 Page Define	
storical Curve		2020-05-15 18:00:51 - 2020-05-15 19:00:51 🔍	
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-0.7 -			
		20 21 20 23 30 穷初 2 31 3 青年 5 6 7 8 9 7	8 9 10 11 12 1
-0.0 -		10 11 12 13 14 15 16 14	15 16 17 18 19 20 22 23 24 25 26 20
-0.9		17 19 20 21 22 23 21 24 25 26 27 28 29 30 28	29 30 1 2 3 4
1-		31 儿童 [•] 2 3 4 5 6 5	6 7 8 9 10 1
-1.1		选择时间	清空 确定
	2020-05-15 18:06:55		
Jata			- 2
. Jata ensor Information	Historical Data Data S	Statistics 2020-05-15 18:03:4	— 🗔 2 - 2020-05-15 19:03:42 《
ensor Information	Historical Data Data S Data	Statistics 2020-05-15 18:03:4 Update Time	- 🛛
. Jata ensor Information Pressure -1 Subordinate Equipment: Explosion-Proof I	Historical Data Data S Data 1.9	Statistics 2020-05-15 18:03:4 Update Time 2020-05-15 18:37:3	- 🛛 2 - 2020-05-15 19:03:42 (4
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Jula ensor Information Pressure -1 Subordinate Equipment: Explosion-Proof I Sensor Type Numerical Type Current State Connected	Historical Data Data S Data 1.9	Statistics 2020-05-15 18:03:4 Update Time 2020-05-15 18:37:3	— 53 2 - 2020-05-15 19:03:42 (0 4
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ensor Information Pressure -1 Subordinate Equipment: Explosion-Proof I Sensor Type Numerical Type Current State Connected Current Value 1.9Psi Update Time 2020-05-15 18:37:34 storical Curve	Pr	Statistics 2020-05-15 18:03:4 Update Time 2020-05-15 18:37:3 10 Article/Page Total 1 Article 2020-05-02 18:03:4 2020-05-02 18:03:4 2020-05-02 18:03:4 2020-05-03 10:55 Numerical Value	- 53 2 - 2020-05-15 19:03:42 (4 4

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4.3.5. Customers can use the data download center of the navigation bar to download each device individually or in batches for historical data recording. The file is saved to the local computer in EXCELL format, which is convenient for customers to analyze and make decisions on the historical data of the equipment. Check the data download interface below:

Data Downloading	默认相				Download Con	figuration
Download List	. 🛌	Explosion-Proof Pressure Transmitter A	ID: 65983	Last Updated:2020-04-21 15:30:14	Selected 0	
	. 💉	Explosion-Proof Pressure Transmitter B	ID: 66005	Last Updated:2020-04-21 18:06:53	Start Time S	elect start time
	. 2	Standard Pressure and Temp Gauge A	ID: 66108	Last Updated:2020-04-23 11:57:40	End Time S Email P	elect end time lease enter email
						Remember the email

5 Data Center	All device grou 👻 Device nar	ne / ID				
Data Downloading	🛃 默认相				Download	Configuration
Download List	🛛 🧝 Đ	plosion-Proof Pressure Transmitter A	ID: 65983	Last Updated:2020-04-21 15:30:14	Selected	3
-	🛛 📓 Đ	plosion-Proof Pressure Transmitter B	ID: 66005	Last Updated:2020-04-21 18:06:53	Start Time	2020-05-08 00:00:00
•	🗹 🗾 St	andard Pressure and Temp Gauge A	ID: 66108	Last Updated:2020-04-23 11:57:40	End Time	admin@holykell.com
L						Remember the email
					Su	omit download application

Data Center	Download All 👻 D	evice name / ID					
Data Downloading	Sketch Map	Device Name	Download start and end time	Receiving Mode	Submission Time	State	Operation
Download List		Standard Pressure and Temp Gauge A	2020-05-08 00:00:00 - 2020-05-15 00:00:00		2020-05-15 19:14:10	Pending Generation	Download Delet
	. 2	Explosion-Proof Pressure Transmitter B	2020-05-08 00:00:00 - 2020-05-15 00:00:00		2020-05-15 19:14:10	Pending Generation	Download Delet
		Explosion-Proof Pressure Transmitter A	2020-05-08 00:00:00 - 2020-05-15 00:00:00		2020-05-15 19:14:10	Pending Generation	Download Dele
		Standard Pressure and Temp Gauge A	2020-05-02 00:00:00 - 2020-05-13 00:00:00		2020-05-13 12:46:39	Generated	Download Dele
	. 2	Explosion-Proof Pressure Transmitter B	2020-05-02 00:00:00 - 2020-05-13 00:00:00		2020-05-13 12:46:39	Generated	Download Dele
	. 2	Explosion-Proof Pressure Transmitter A	2020-05-02 00:00:00 - 2020-05-13 00:00:00		2020-05-13 12:46:39	Generated	Download Dele
		Standard Pressure and Temp Gauge A	2020-04-02 00:00:00 - 2020-04-30 00:00:00		2020-04-30 15:47:52	Generated	Download Dele

		_		A1 • (9	fx 更新时间		*				*			
Data Downloading	Sketch Map	Device Name			R	C	D	F	F	G	н —	State	Operation	
			1	更新时间	Pressure 1		~							
Download List			2	2020-05-02 00:26:55	0.0039									
	5	Standard Pressure and Ter	3	2020-05-02 01:26:55	0.0039							Pending Generation	Download Dele	
			4	2020-05-02 02:26:55	0.0039						-			
			5	2020-05-02 03:26:55	0.0000						1			
			6	2020-05-02 06:26:55	0.0421									
		Explosion-Proof Pressure T	7	2020-05-02 07:26:55	0.0039							Pending Generation	Download Dek	
	<u> </u>		8	2020-05-02 08:26:55	0.0039	_								
			9	2020-05-02 09:26:55	0.0000						_			
			10	2020-05-02 10:26:55	0.0000						_			
		Explosion-Proof Pressure T	11	2020-05-02 11:26:55	0.0000	_						Pending Generation	Download Dele	
			12	2020-05-02 12:26:55	0.0039	_								
			13	2020-05-02 13:26:55	0.0039	_					_			
			14	2020-05-02 14:26:55	0.0039									
		Standard Brossure and Tor	15	2020-05-02 15:26:55	0.0039	_						Generated	Download Dal	
		Standard Pressure and Ter	17	2020-05-02 16:26:55	0.0039	_						Generated	Dominoad	
			10	2020-05-02 17-26-55	0.0039	-								
			19	2020-05-02 18:26:55	0.0009	-								
		5	20	2020-05-02 20-26-55	0.0000	-								
	<u>```</u>	Explosion-Proof Pressure I	Explosion-Ploor Plessure 1	21	2020-05-02 21-26-55	0.0039	_						e Generated	Download
			22	2020-05-02 22-26-55	0.0039									
			23	2020-05-02 23:26:55	0.0039									
			24	2020-05-03 00:26:55	0.0039									
		Explosion-Proof Pressure T	25	2020-05-03 01:26:55	0.0039							9 Generated	Download Dele	
	_		26	2020-05-03 02:26:55	0.0039									
			27	2020-05-03 03:26:55	0.0039									
			28	2020-05-03 04:26:55	0.0039									
	25	Standard Pressure and Ter	29	2020-05-03 05:26:55	0.0039							2 Generated	Download Dele	
			30	2020-05-03 06:26:55	0.0000	_								
			31	2020-05-03 07:26:55	0.0039									
			32	2020-05-03 08:26:55	0.0039						_			
			33	2020-05-03 09:26:55	0.0039						_			
			34	2020-05-03 10:26:55	0.0039	_								
			35	2020-05-03 11:26:55	0.0039	_								
			36	2020-05-03 12:26:55	0.0000	_					_			
			37	2020-05-03 13:26:55	0.0000	-								
			38	2020-05-03 14:26:55	0.0000	-								
			40	2020-05-03 15:26:55	0.0000	-								
	Delete		40	2020-05-03 16:26:55	0.0000	-						Total 7 Article	1 Dago Dafas	
	Delete		42	2020-05-03 17:26:55	0.0000	-							Define	
			43	2020-05-03 18-26-55	0.0000	-								
a56b-9ed5- visv			11	1010 03 03 19 20 33	0.0000	-					*		全部严	

Notes:

1. Make sure that the flow card purchased is not in arrears and is normally activated.

2. Make sure that the plug of the power cord is firmly in contact, and power off the battery before replacing it.

Finally, with regard to the cost of using the MACSENSOR cloud platform, the MACSENSOR cloud platform is free for sample testing and small batch system application customers (the number of devices used by a single customer is less than 50). For the number of online devices of a single customer greater than 50, according to 1 USD / unit /year counts the annual fee for the number of devices with more than 50 units.

At the same time, for the independent cloud platform customers with customized company LOGO, the annual fee for the first year is US \$ 1,250, and the annual fee is US \$ 650 in the following year, each one platform with max 3,000 capacity of equipment. If customers want to extend more big capacity of equipment, each time increase 3,000pcs and US \$ 500 each year.

5. How to configuration when use client's platform.

At first, please follow up pages 6 basic steps to replacement SIM flow card. Second, MACSENSOR Smart Wireless Sensors connect with third party platform have two options as below:

5.1. Data upload to third party platform directly.

5.1.1 Configuration Gauge by USB-TYPE C communication cable, computer/laptop and configuration software (English and Chinese optional Language)

MAC Sensor Co.,LTD.

See below Pictures Show:



	9						
Operation La	nguage	Help					
۲	Q.	+	5	•	۲		S
Communication	Refresh	Import	Export	Sync time	History	Update	Monitoring

	Hulli Cation
Serial port:	COM7 -
Baudrate:	115200 ~
port:	
	Search device

Communication Port Setting and Connection

🧕 Communication	S. Refresh	👃 Import	7 Export	😁 Sync time	🥥 History	- 🚱 Update	🐷 Monitoring	
5服	务器网络	殳置[Ser	ver Set	tings]	-			
6. 网络运营	商[Opera	ator](Te	lecom/	Mobile/U	nicom/A	UTO)	: AUTO	
7. 通讯方式	;[protoco	l](MQT	T/TCP)				: MQTT	
8. 服务器地	計[Serve	r <mark>Addr]</mark>					3	
9. 服务器端	□[Serve	r Port]					: 1883	
0.客户端IC)/序列号[Client I	D]				: I0BDHCY60M0A2G42	
1. 用户名[L	Jser Nam	ne]					: MQTT	
2. 密码[Pas	sword]						: MQTTPW	
3. 主题[Top	pic]						: I0BDHCY60M0A2G42	
4. 订阅[Sub	pacription	n]					: I0BDHCY60M0A2G42/+	
5. APN(默ì	人为空)						:	
6. APN NA	ME(默认)	为空)					:	
7. APN PA	SSWORD	(默认为	空)				:	
8系	统设置[Sy	stem S	ettings]					
9. 上报时间]Uploadti	ime[mir	n-2 max	(-1440分	中]		: 3	
0. 是否开启	打包上传	功能(or	n/off)				: on	
1. 温度量程	Range[°C	[]					: -20~70	
2. 压力量程	Range[K	Pa]					: 0~20030.5	
?温度单位	Unit						:℃	
一力单位	Unit(MP	a/KPa/	Pa/psf/	psi/bar)			: MPa	
. 場	除Elimin	ate Sm	all- <mark>Sign</mark>	al[<0.002	5](on/of	f)	: on	
	™开关(0	n/off/c	lr)				: off	

Third Party Server IP address / Server Port / APN Setting

5.1.2 Third Party Platform Analysis Wireless Gauge Module Protocol

Besides above steps parameters configuration, Client's need contact with your platform design engineer's team and asking them help you to Analysis our Gauge protocol on your platform. So that the platform can understand MACSENSOR wireless sensors communication and working mechanism.

MACSENSOR equipment/gauge/wireless sensor analysis protocol inquiry our sales engineer, please.

5.2. Data upload to third party platform by MACSENSOR API port

5.2.1. The same steps as 5.1.1.

5.2.2. Besides above steps parameters configuration, Client's need contact with your platform design engineer's team and asking them help you to match API port, API port documents please inquiry MACSENSOR sales engineer.

6. Product warranty and after-sales policy

MACSENSOR wireless intelligent products provide a 12-month warranty period (except batteries). The batteries are consumables. The battery life is related to the data collection time period and data upload platform time frequency set by the customer. Therefore, we only provide a 2-month warranty for battery. The battery life can be up to five years

For product after-sales policy, please refer to MACSENSOR's product after-sale warranty policy rules.

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