

# [Chinastar CS-iWPT302 Bluetooth Pressure Transmitter User Manual](#)

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# **Chinastar CS-iWPT302 Bluetooth Pressure Transmitter User Manual**

Chinastar CS-iWPT302 Bluetooth Pressure Transmitter User Manual

Xi'an Chinastar CS-iWPT302 Bluetooth Pressure Transmitter User Manual

CS-iWPT302 Wireless Bluetooth Pressure Transmitter User Manual

CS-iWPT302 User Manual

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CS-iWPT302



## Description

CS-iWPT302 wireless Bluetooth pressure transmitter uses lithium battery power supply, built-in disposable lithium battery, adopts the international first-class transmitter core, transmitter ASIC and accessories, supports Bluetooth communication, parameters can be configured. The main application areas include pressure collection of oil, gas, heating and other transmission pipelines and other facilities, and transmission through

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Bluetooth, with Bluetooth host receive and use, can monitor and collect data through mobile APP.

## Applications

- Wireless pressure measurement
- Pipeline pressure monitoring
- Inspection and collection

## Features

- Built-in disposable lithium battery
- High measurement accuracy
- Parameters can be configured
- High measurement accuracy
- Small size, easy to install
- Low power design, long battery life

## Performance Specifications

Item	Technical Parameter	Remark
<b>Transmission mode</b>	Bluetooth 5.1	
<b>Pressure range</b>	0 ~ 50bar	( Customized ) The default gauge pressure is 50bar
<b>Pressure accuracy</b>	$\pm 0.5\%FS @25^{\circ}C$ $\pm 1.0\%FS @-20\sim 80^{\circ}C$	
<b>Overload pressure</b>	1.5X Typ.	
<b>Burst pressure</b>	2.5X Typ.	
<b>Pressure connector</b>	NPT 1/4	Customized
<b>Insulate Resistance</b>	100M $\Omega$ @100VDC	
<b>Measuring medium</b>	Compatible with SS and fluororubbers for liquids or gases	
<b>Core compensated temperature</b>	(-20 ~ +80) $^{\circ}C$	
<b>Temperature range</b>	-40 ~ 85 $^{\circ}C$	The internal ambient temperature of the product
<b>Temperature accuracy</b>	$\pm 2^{\circ}C$	Typical value

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<b>Power mode</b>	3.6VDC	ER14250 Disposable lithium battery
<b>Max working current</b>	6mA	@25°C
<b>Battery life</b>	> 5 Years	60 seconds sampling interval 10 second broadcast interval
<b>Shell material</b>	304SS, ABS+PC	
<b>IP Rating</b>	IP65	
<b>Operating temperature</b>	(-40 ~ +85)°C	
<b>Storage temperature</b>	(-40 ~ +85)°C	Recommended that the storage temperature not exceed 30°C
<b>ATEX certification</b>	TBD	

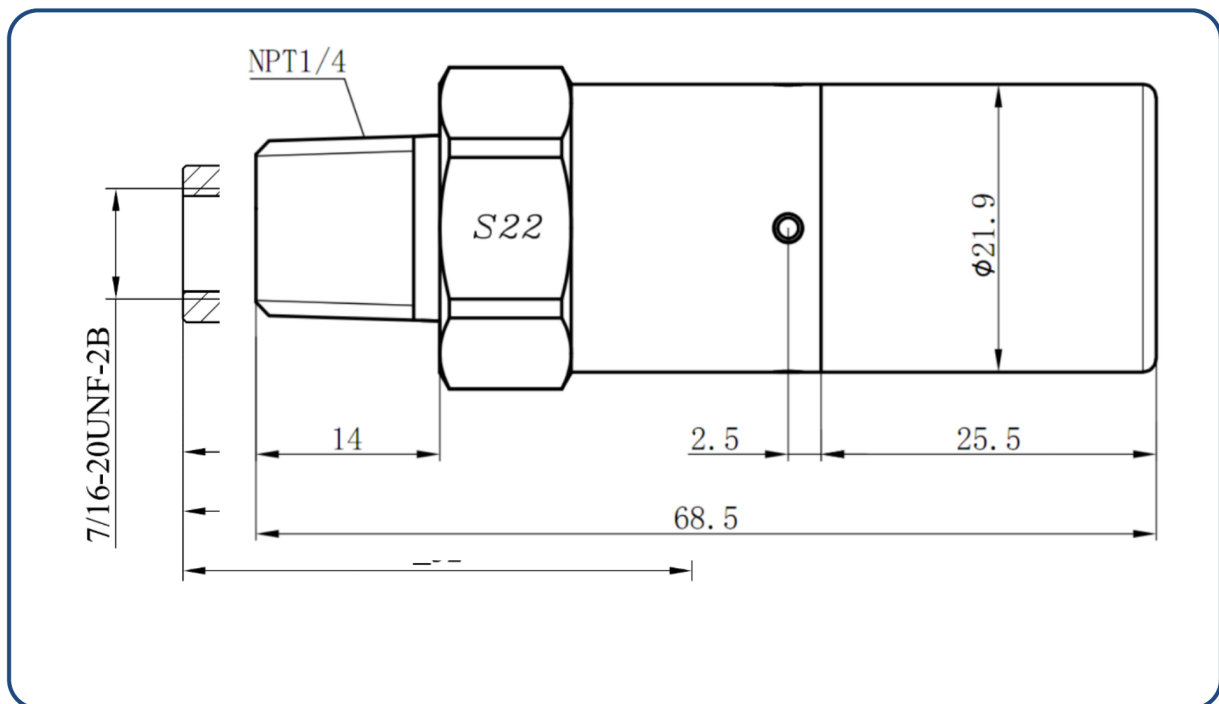
**Note1:** The sampling interval ranges from 2 to 180s (60s by default), and the Bluetooth broadcast interval ranges from 1 to 10s (10s by default).

**Note2:** The default unit of pressure value is Bar. Optional units are kpa and Psi. Conversion relationship: 1Bar = 14. 5Psi, 1Bar = 100kPa.

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## Structure and Dimension (mm)



## Instructions

### 1. Product Activation

After delivery, the product is in deep hibernation state (no broadcast, no sampling) and needs to be activated. Activation method: Use a magnetic steel close to the top and remove it. After successful activation, the unconnected broadcast is automatically sent. Turn on the Bluetooth of the mobile phone or other Bluetooth devices to scan the Bluetooth broadcast information (product Bluetooth broadcast name: "CS-IWPT"), analyze the Bluetooth broadcast data to obtain the pressure value.

### 2. Communication Protocol

Refer to {CS-iWPT302-XY Bluetooth Pressure Transmitter Communication Protocol} .

### 3. Modify Parameters

Refer to { CS-iWPT302-XY Bluetooth Pressure Transmitter Communication Protocol} ,

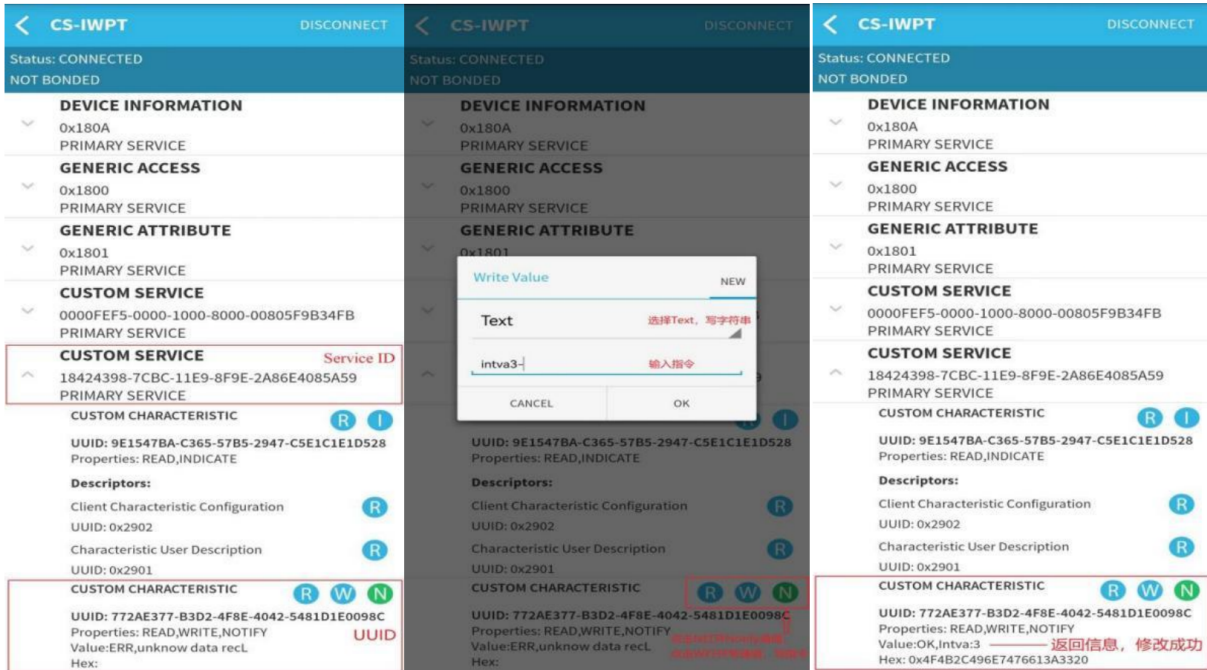
Example for modifying the broadcast interval:

Use the magnetic steel close to the top and remove it, switch the device to the connectable broadcast mode, turn on Bluetooth on the mobile phone and use Bluetooth debugging software to connect the device, and find the following information after successful connection Service ID and UUID. [Manualsum](#)

Service ID: 18424398-7cbc-11e9-8f9e-2a86e4085a59;

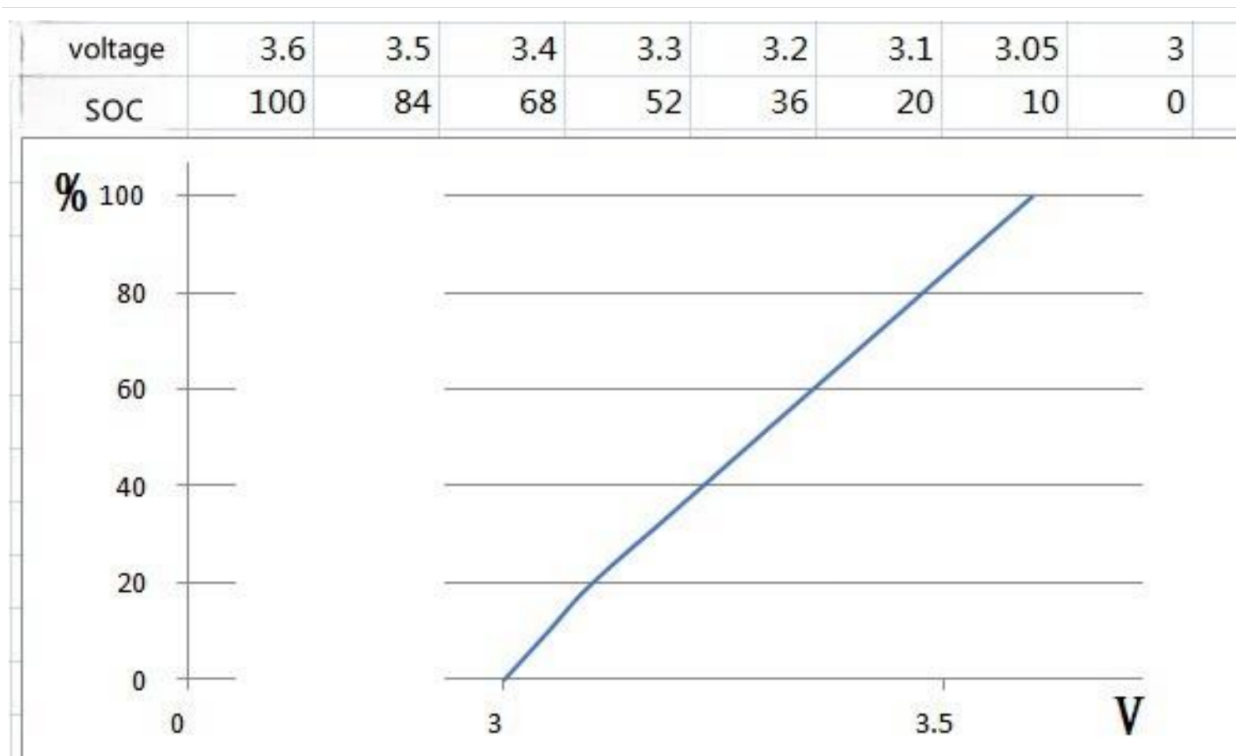
UUID:772ae377-b3d2-4f8e-4042-5481d1e0098c

Open the Notify channel under this UUID, and enter the command intva3- in the write channel to change the broadcast interval. After the change is successful, the command is returned in the Notify channel: OK, Intva:3,



## Battery Level

The relationship between voltage and remaining power is shown below:



## FAQ

The following table lists possible problems with sensor terminals and solutions. If your problem is not listed or the solution does not address your problem, please contact us.

### Fault analysis and elimination

Num	Fault	Case analysis	Method
1	Broadcast data exception	There are too many Bluetooth broadcast signals on site, and the received information is interfered	Calculate and compare broadcast data CRC to exclude abnormal data
2	Hard to scan the broadcast signal	The Bluetooth broadcast interval is too large	Modify broadcast interval
3	The pressure changes but the broadcast pressure does not change	Excessive sampling interval	Modified sampling interval

### **Disposal methods of hazardous wastes such as waste circuit boards and their components after the end of product life**

After the end of the product life, each part shall be distinguished according to the "National hazardous waste list" to determine whether it is hazardous waste. Among them, the waste lithium battery not disassembled is not hazardous waste, and the waste circuit board (including components, chips, plug-ins, pins, etc. attached to the waste circuit board) belongs to hazardous waste.

The part that is not hazardous waste shall be treated as general industrial solid waste, and the lithium battery shall be handed over to the nearby renewable resource recovery department or sent to the product manufacturer for recycling.

Hazardous wastes must be handed over to legally qualified departments for disposal in accordance with national regulations, and shall not be dumped or stacked without authorization. If it is really necessary to store temporarily, protective measures meeting the national environmental protection standards must be taken, and the storage period shall not exceed one year. At the same time, the time and place of temporary storage and the protective measures taken shall be reported to the competent environmental protection department. Hazardous waste transfer activities can be arranged according to the actual production situation. The system shall be strictly implemented in the transfer process.

## **Statement**

The company reserves the right to modify the specifications and contents of this manual. Subject to modification without notice. Due to the update of the product, the individual details of this document may not match the product, please refer to the actual product. The interpretation right of this document belongs to our company.

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