



Xi'an UTOP Measurement Instrument Co., Ltd.

UIB7 Wireless Digital Pressure Transmitter



Xi'an UTOP Measurement

Instrument Co., Ltd.

Add: RM1202-1203, Unit3, Hecheng International,
Taibai South Rd., High-tech District, Xi'an,
China 710065

Tel: +86-29-8918 1790

Fax: +86-29-8918 1792

Website: www.utopsensor.com

Email: sales@utopsensor.com



1. General description

UIB7 wireless digital pressure transmitter is composed by pressure sensor, signal processing electric circuit, central processor and wireless communication channels. This product uses the large capacity & high performance lithium battery as power supply, its service life can reach 1~2 years, therefore, this product does not need other external power supply.

UIB7 wireless digital pressure transmitter realizes long-distance real-time monitoring and wireless data transmission without any field wiring, it omits the trouble of ordinary measuring instruments which need field wiring, not only save manpower, also save construction costs.

UIB7 wireless digital pressure transmitter is specially suitable for the pressure measurement in the open country or the scene, where is unable to provide power source, but need the data to carry on live transmission, such as oil field, oil well, heating pipelines and so on.

2. Features

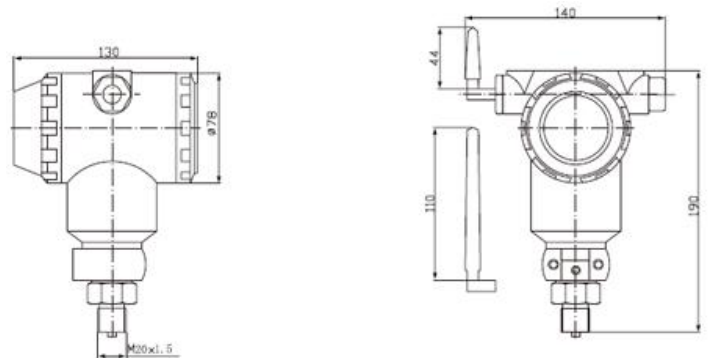
- Pipe line pressure measurement transferred wirelessly, typically used for wellhead pressure monitoring in oil field.
- Explosion proof design: flame proof cast aluminum housing, intrinsic safety PCB.
- Protection: IP67
- ZigBee Communication, can use hand-held communicator to do configuration and debug.
- LCD display with wide working temperature range of -40~70°C. The display can read pressure data, battery data and wireless communication channel etc.
- Installation direction can be adjusted: connect it through loose joint or connector to pipeline valve, its direction can be adjusted.
- 38Ah high performance lithium battery, long working life.
- High gain antenna, wireless communication distance more than 200m.
- Custom-made cable protective glove, to prevent the cable from breaking.

3. Specifications

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- (1) Medium: all gas or liquid compatible with stainless steel
- (2) Pressure range: 0~60MPa
- (3) Accuracy: 0.5%FS
- (4) Overload pressure: 150% F.S
- (5) Communication cycle: 1 minute~12 hours selectable setting
- (6) Decimal: 0~3 setting
- (7) Signal: ZigBee wireless
- (8) Transmitting power: ≤40mW
- (9) Communication distance: ≥200m
- (10) Power: 3.6V lithium battery
- (11) Explosion proof: Exib IIB T4 Gb
- (12) Protection: IP67
- (13) Process connection: G1/4, G1/2 etc
- (14) Ambient temperature range: -40~70°C
- (15) Ambient humidity: ≤97% RH
- (16) Gross weight: 2000g

4. Dimensions



5. Panel details





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installation methods: one ---(1) install the transmitter in the upper port of the valve, two---firstly screw the loose joint or adapter into the valve upper port, then screw the transmitter in to the upper port of loose joint or adapter. The 2nd installation can adjust the direction by adding loose joint or adaper. After installation, open the needle valve to make sure no leakage.

code	details	code	details
1	Our of limit alarming light, if pressure or temperature out of limit, the light twinkles. .	8	ZigBee signal
2	Debug interface	9	ZigBee signal strength indicator

7. Parameter setting

(1) Select “initialization” on the hand held communicator, input wireless communication channel, network, group number, serial number in the pop-up dialog box, then press set button to save.

(2) put the magnet on the transmitter’s magnetic induction area for 6seconds, the transmitter resets and acquires parameters from communicator.

(3) when hearing the communicator sounds “di”, this means the transmitter’s parameters have been set successfully.

phenomenon	Reason	Solution	
No reading on display	Battery out of power	Replace the battery	
Upper machine cannot receive data	Wireless parameter setting is not same.	Set the transmitter wireless channel and ID is same as upper machine.	
Pressure value is lower than actual value.	Pressure guide hole is blocked.	Remove the transmitter and clean the pressure guide hole.	
3	Reset button, can clear the zero drift if press 2 seconds.	10	ZigBee communication channel indicator
4	Calibration button 1	11	Pressure or temperature value
5	Calibration button 2	12	Unit of pressure or temperature
6	Battery indicator	13	Pressure full scale indicator
7	Battery voltage indicator	14	Group no. and S/N

8. Trouble shooting

When the transmitter can not work properly, please check the transmitter as following table. If the trouble can not be sloved, please contact UTOP directly.

9. Guaranty

The products are guaranteed free of production defects and the quality is guaranteed for 12 months from the shipment date provided that the user obeys the usage and protection rules.

6. Installation

- (1) the measured pressure should be within the pressure transmitter’s range.
- (2) The installation thread must be matching transmitter’s connection.
- (3) if the transmitter is installed in pipeline, please firstly close the valve (needle valve or sluice valve) in the pipeline. There are 2