

ZNC-PT-T Integrated Temperature and Pressure Transmitter Technical Specifications



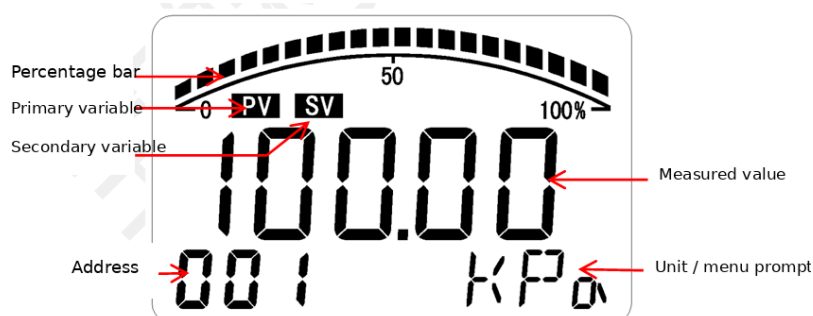
I. Overview

This wired integrated temperature and pressure transmitter is designed as a supporting device for oil and water well monitoring systems. It is suitable for pressure monitoring in oil and water well production, storage, and transportation processes. The transmitter uses a diffused-silicon sensing element to measure the pressure signal. The signal is processed by a dedicated integrated circuit and converted into an internationally standardized output signal. Advanced pressure compensation technology is applied to the pressure-sensitive element, ensuring measurement accuracy and reliable continuous operation in harsh environments. The transmitter can be used with various intelligent digital display controllers, industrial computers, and distributed control systems (DCS) to achieve automated measurement and control of industrial processes.

II. Technical Specifications

Medium	Liquid or gas	T/P Range	Temp.: -50 to +150 °C Pressure: 0-6 MPa
Accuracy	Class 0.5	Overload	150% F.S.
P. Nonlin.	0.25% F.S.	P. Repeat.	0.15% F.S.
Power Supply	24 VDC	Temp. Accuracy	Class 0.5
Output	RS485 (Modbus)	Ex Protection	Ex ib IIC T4 Gb
Enclosure	IP65	Ambient RH	≤97% RH
Net Weight	950 g	Ambient Temp.	-40 °C to +70 °C

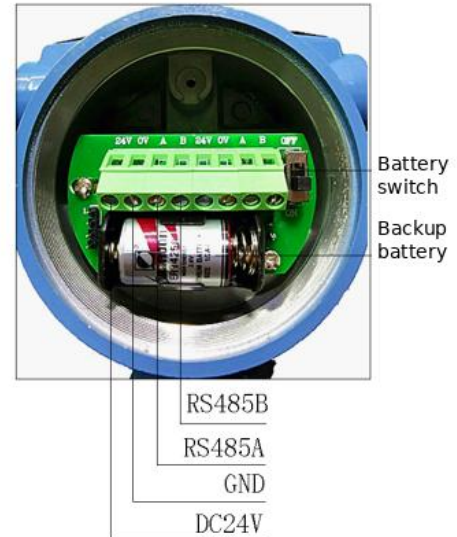
III. Display Panel Description



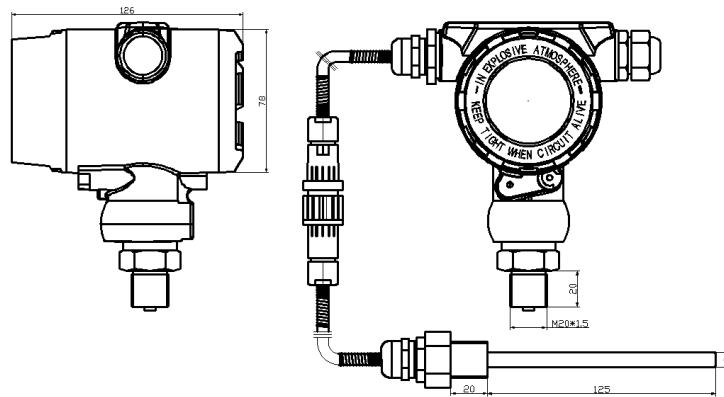
IV. Wiring Diagram

Fixed terminal blocks are used. Each terminal provides two connection points for convenient field wiring, and conductors enter the terminals at a 45-degree angle. Terminal designations are shown below:

Terminal	Electrical Function
24V	+24 VDC supply
0V	0 VDC / negative
A	RS485-A
B	RS485-B



V. Outline Dimensions



VI. Installation

1. Verify that the process pressure range matches the measuring range of the transmitter to be installed.
2. The pressure sensing head is available with an M20 x 1.5 or 1/2 NPT process connection. Ensure that the mating process connection is compatible.
3. Place a PTFE gasket inside the mating connection, and then tighten the transmitter securely.
4. Remove the rear cover of the transmitter. Route the power and signal cables through the side electrical entry, connect them according to the wiring diagram, and reinstall the rear cover.

VII. Parameter Settings

1. User Settings

Briefly press the "M" key to enter password input mode. Press the "Z" key to move the cursor and the "S" key to change the selected digit. Enter password "00066" to access the user settings.

ADDR: Device address setting; range: 1-247

BAUD: Baud rate setting; options: 1200, 2400, 4800, 9600, 19200, 38400

AH-EN: High-limit alarm enable (0: Off; 1: Pressure; 2: Temperature; 3: Pressure and temperature)

AL-EN: Low-limit alarm enable (0: Off; 1: Pressure; 2: Temperature; 3: Pressure and temperature)

Address: No.12 yard in the yard of Outer Ring Industrial Company, Fujin Road, Zhongbei Town, Xiqing District, Tianjin, China Zip code: 300300 Telephone: 008617320288925

WEB: <https://www.zinacainstruments.com/>

E-mail: sales@zinacainstruments.com



P-DOT: Pressure decimal point position

AH-P: High-pressure alarm setpoint

AHD-P: High-pressure alarm delay

AL-P: Low-pressure alarm setpoint

ALD-P: Low-pressure alarm delay

T-DOT: Temperature decimal point position

AH-T: High-temperature alarm setpoint

AHD-T: High-temperature alarm delay

AL-T: Low-temperature alarm setpoint

ALD-T: Low-temperature alarm delay

SAVE: Exit. Select YES to save the settings or NO to exit without saving.

Note: If no key is pressed for 60 seconds, the instrument automatically exits the basic user settings menu.

2. Pressure Zero Adjustment

Briefly press the "M" key to enter password input mode. Press the "Z" key to move the cursor and the "S" key to change the selected digit. Enter password "00036" to access the pressure zero adjustment menu.

YES: Perform zero adjustment

RST: Clear the zero adjustment

NO: Exit without zero adjustment

VIII. After-Sales Service

The product is covered by a three-year warranty, provided that the user fully complies with the instructions, operates the product correctly, and no damage is caused by misuse or human factors.

IX. Packing List

No.	Description	Qty.
1	Integrated temperature and pressure transmitter	1
2	Product manual	1
3	Test report	1
4	Certificate of conformity	1