

# Temperature Transmitter Data Sheet

## SBWZ Serial Temperature Transmitter

### Introduction

- SBWR Serial thermocouple temperature transmitter and SBWZ serial RTD temperature transmitter is a spot mounted temperature transmission unit in DDZ-S serial instruments and meters .
- It adopts the two-wire transmission method (the power input and the signal output are two communal conductors).
- There is a linear 4~20mA current signal between the output and the measured temperatures.
- The transmitter may be installed inside the terminal box of the thermocouple and the thermal resistance to form an integral structure, and also independently mounted in the instrument panel as a change-over unit.
- Application: To be a new generation thermometric meter, it is widely applied in the industrial and scientific research fields such as petroleum, chemicals, textile, metallurgy, electro-machinery, electric force, aviation, food, processing, pharmaceutical engineering, etc for the purpose of automated temperature testing, transmitting and controlling.

### Features:

- ◆ Can be directly installed in the sensor terminal box
- ◆ Accurate signal can be transmitted far way(Max 1000M)
- ◆ High accuracy with long-term stability, maintenance-free



RoHS

### Technical Characteristics

Model	SBWZ
Input Signal	Thermocouple: K E J B S T N RTD: PT100 CU50 CU100
Output Signal	4 ~ 20mA DC
Working Voltage	Related voltage: 24VDC $\pm$ 10% (Ordinary 12V~35V , Intelligent 12V~45V)
Intrinsic Error	0.5%FS, 0.2%FS (Intelligent )
Mode Of Connection	Two-wire system, three-wire system, four-wire system
Allowed Load Resistance	500 $\Omega$ (24VDC)
Ultimate Load Resistance	R(max)=50(Vmin-12)

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Measuring Range	-200~1800℃
Ratio of Environment Effects	$\delta \leq 0.05\%/^{\circ}\text{C}$
Work Environment	Temperature: -25-+80℃(Ordinary) -25-+70℃(Digit Display) -25-+75℃(Intelligent)
	Relative Humidity:5%-95%
	Mechanical Vibration $f \leq 50\text{Hz}$ , swing $\leq 0.15\text{mm}$
	Non-corrosive gas or similar environment
Pipe Spec	Stainless steel pipe diameter: $\Phi 4$ 、 $\Phi 6$ 、 $\Phi 8$ 、 $\Phi 10$ 、 $\Phi 12$ 、 $\Phi 14$ 、 $\Phi 16$ Pipe Length: 30mm ~ 100mm ~ 200mm, or customized length available
Case	Blue $\Phi 36 \times 16 \text{ mm}$

## Connection

