

# UT12 Digital Temperature Transmitter

## Description

UT12 is made with integrated construction for the direct measurement of various liquid, gas and solids surface temperature in the range of -200 - 500 C This product is made of temperature element, and uses special temperature module to adjust the temperature element's linearity and output standard analog signal. UT12 is featured with good performance and stability. It is sealed with epoxy resin, this construction assures UT12 has good anti-shock capability and withstands high temperatures, also has high mechanical strength, is suitable for applications in bad working conditions. UT12 can emit digital signals to carry on data transmission with computers directly.

UT12 has widely been used for temperature measurement in industries such as petroleum industry, chemical industry, spinning and weaving, mining, medicine, electric power, environmental protection, municipal administration, food industry as well as scientific research...etc.

## Features

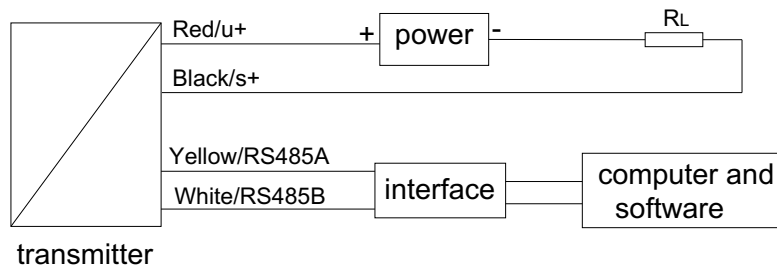
- Compact size, easy installation
- Can be made with live display
- Uses Pt100 thermal resistor
- RS485 half-duplex communication, baud rate can be chosen, communication address can be set.
- MODBUS protocol



## Specifications

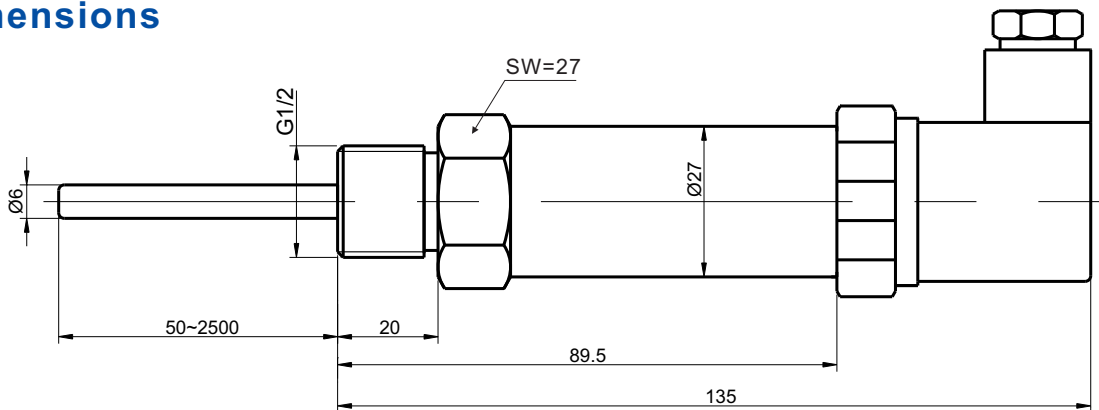
temperature measurement element	Pt100 or other thermal resistor
measured medium	solid, gas or liquid compatible to stainless steel
measured medium's temperature	-200°C~+500°C
insert depth	50mm~2500mm(can be made upon customer's request)
output signal	4~20mA
communication	MODBUS protocol (RS485 interface)
accuracy	0.2%FS,0.5%FS(standard),1%FS
circuit working temperature range	-30°C~+80°C
storage temperature range	-40°C~+125°C
temperature limit	120% of measured range
power supply	10~30VDC(15~30VDC for with indicator)
long term stability	0.15%FS/year
load resistance	>500Ω(24V supply)
circuit temperature shift	<±0.75%FS/50°C
response time	<1ms
process connection	G1/2 or others
electrical connection	hirschmann connector
material of housing	stainless steel

## Electrical connection



Electrical connection of RS485 interface communication

## Dimensions



## Ordering code

UTB-2							
UTB-2	range	measuring range: -200°C~+500°C					
	(X1~X2)°C	X1-lower limit of measured temperature, X2-higher limit of measured temperature					
	code	output and communication					
	R	MODBUS protocol (RS 485 interface)					
	code	accuracy					
	C	0.25%FS					
	D	0.5%FS					
	E	1%FS					
	code	process connection					
	P2	G1/2					
	P4	M20×1.5					
	P5	1/2NPT					
Pz	customer request						
code	electrical connection						
E1	hirschmann connector						
E2	aviation connector						
Ez	customer request						
length	insert length						
L	50mm~2500mm						
UTB-2	(-50~200)°C	R	D	P2	E1	50mm	