

## PT20SR-3783 Intelligent Digital Pressure Transmitter

### Features

- RS485 Communication Interface( standard MODBUS-RTU protocol)
- Netting Available
- Support software or button adjustment, flexible and convenient
- Classified code management for parameter set of different users to ensure safety and reliability
- Great output consistency and replaceable.....
- Support offset set and range adjustment
- Aluminum alloy housing and IP65 protection
- Support customized solution according to different applications



### Introduction

PT20SR-3783 is a high stable intelligent digital pressure transmitter, support real-time pressure measurement and display. It uses intelligent processing circuit, the most advanced design and manufacture technology of piezo-resistive pressure transmitter, and is available for pressure signal and temperature signal output that in accordance with standard MODBUS-RTU protocol. It can be used in environmentally poor outdoor area and in applications which requires on-site pressure display, zero set and range adjustment. It is suitable for process control and pressure measurement in petroleum, chemical, metallurgy, electric power, light industry, textile, building materials, hydrogeology, food, medicine, environmental control and other industries.

### Specification

Range: -100kPa...0kPa~10kPa...100MPa  
Pressure type: Gauge / Absolute/Sealed Gauge  
Over pressure: 1.5 times FS / 110MPa (min. value is valid)  
Accuracy:  $\pm 0.5\%$ FS  
Stability:  $\pm 0.3\%$ FS/YEAR Hysteresis:  
Thermal error:  $\leq \pm 0.04\%$ FS/ $^{\circ}\text{C}$ ( $\leq 100\text{kPa}$ );  $\leq \pm 0.03\%$ FS/ $^{\circ}\text{C}$ (>100kPa)  
Power Supply: 9V~28V DC  
Output: RS485 Interface (MODBUS-RTU protocol)  
Display: 4 digit 0.36" Nixie Tube  
Display Range: -1999~9999

Working Temperature:  $-10^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$

Limit Working Temperature:  $-30^{\circ}\text{C}$ ~ $85^{\circ}\text{C}$

Storage Temp.:  $-40^{\circ}\text{C}$ ~ $85^{\circ}\text{C}$

Measurement Error:  $\pm 2^{\circ}\text{C}$ ( For "temperature & pressure type" only )

Insulation: 100V, 100M

Shoc: 5g, 10Hz~200Hz

Impact: 20g, 11ms

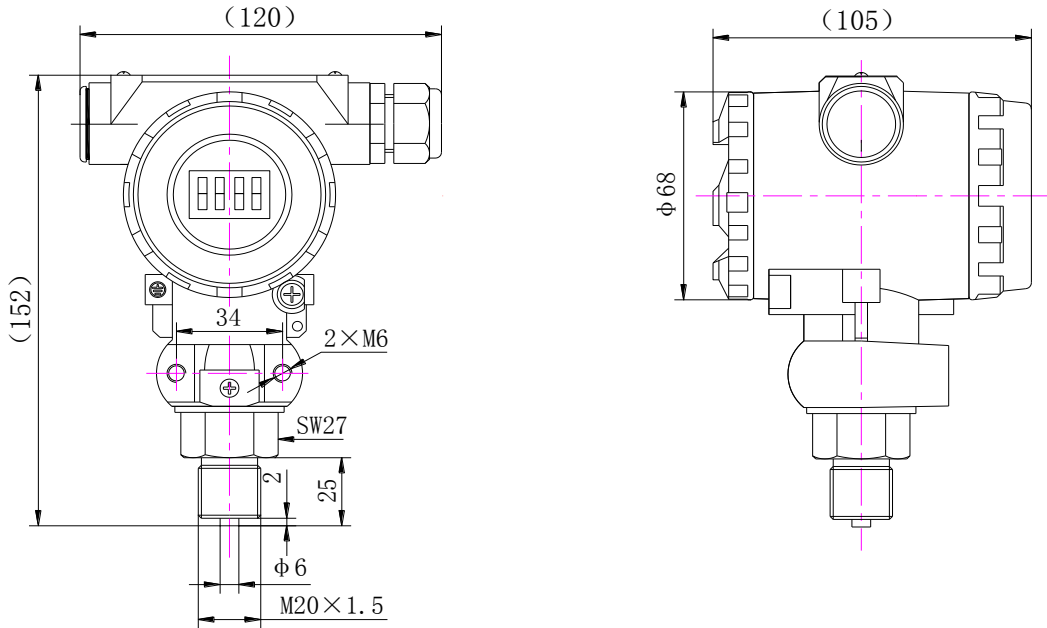
Protection:IP65

Weight: about 900g

**Note:**1. Shrinking range is 1/5 of basic range, no range extension

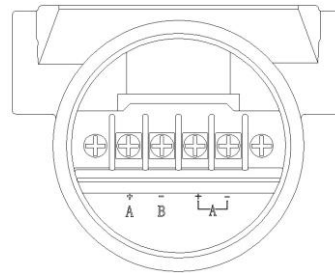
2. For special temperature requirement, please feel free to contact our company

**Outline Construction and Installation**

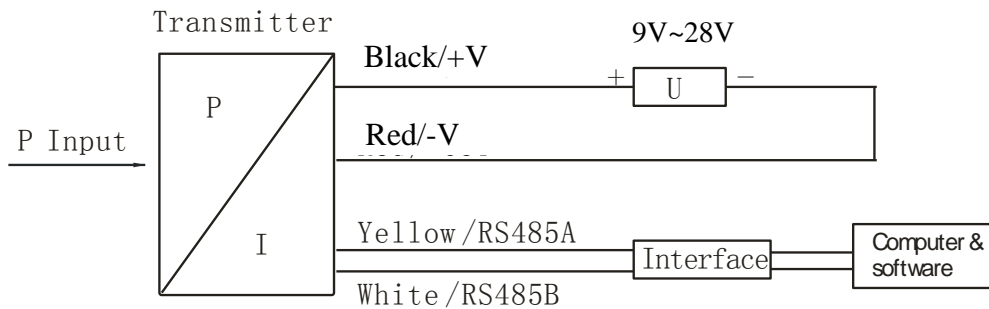


**Electric connection**

Terminal	Definition
+/A	V+
-/B	V-
	485A
	485B

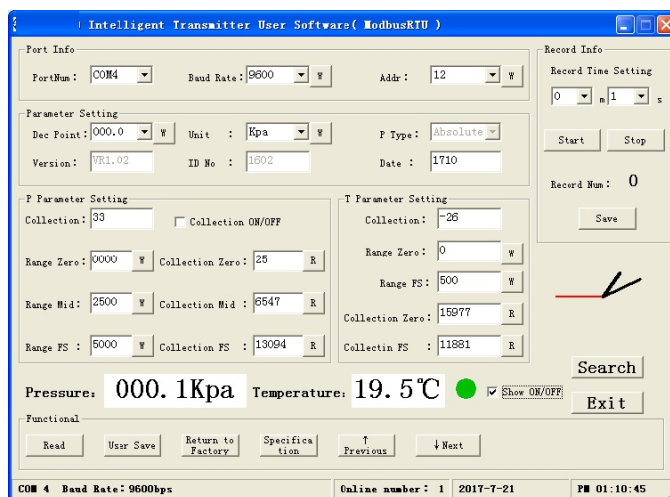


Electric connection for transmitter with RS485 interface(MODBUS Protocol):



**Assistant Software**

RS232/485 Conversion module is used to communicate with RS485 interface transmitter, available for real time pressure/temperature display and calibration on site. Some parameters calibration was done before being transported at factory, so users do not have to modify them. When mistaken operations happen, users can press “Back to Factory Setting” to turn it to factory setting. Besides, the software keeps Data Record section, which allow users to set the record interval freely for recording and saving data, and the data can be saved in the forms of “\*.Excel”.



**Note:** PT20SR-3783 Transmitter software, available for download on our website, [www.zoricreato.com](http://www.zoricreato.com) ; Please click “specification” button on the interface for software use instruction.

### Order Guide

PT20SR-3783	Intelligent Digital Pressure Transmitter		
	Range	-100kPa…0kpa~10kPa…100MPa	
	[0~X]kP or MPa	X is actual measured range	
	Code	Output Signal	
	R8	RS485 interface, MODBUS communication protocol	
	Code	Construction Material	
		Diaphragm	Pressure Port
	22	S.S.316L	S.S.
	24	S.S.316L	S.S.316L
	Code	Others	
	C <sub>1</sub>	M20×1.5 male, face type seal	
	C <sub>3</sub>	G1/2 male	
	C <sub>5</sub>	M20×1.5 male, waterline seal	
	PC <sub>1</sub>	Flush, M20×1.5 Male	
	PC <sub>3</sub>	Flush, G1/2 Male	
	G	Gauge	
	A	Absolute	
	S	Sealed Gauge	
PT20SR-3783	[0~100]kPa	R8	22 C1G Whole Specs.

### Notes

1. Please note in the order if the user needs zero pressure as negative pressure.
2. The temperature signal is optional, please note in the order if users need.
3. For special requirement, please feel free to contact us.