Datasheet

Paperless recorder

SUP-R200D

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Datasheet

Paperless recorder
SUP-R200D

The paperless recorder is a variety of input signals that need to be monitored and recorded in the industrial site, such as the temperature signal of the thermal resistance and the thermocouple, the flow signal of the flow meter, and the pressure signal of the pressure transmitter. The data is processed by a high-performance microprocessor. On the one hand, it is displayed in various forms on the high-resolution liquid crystal display screen. On the other hand, the data of these monitoring signals are stored in the large-capacity storage chip inside the instrument, so that the Data and graph query, page and print can be performed directly on the instrument.

Application

- Metallurgy
- Oil
- Chemical
- Building materials
- Papermaking
- Food
- Prmaceutical
- Heat treatment
- Water treatment
- PID adjustment

Paperless recorder SUP-R200D

Features

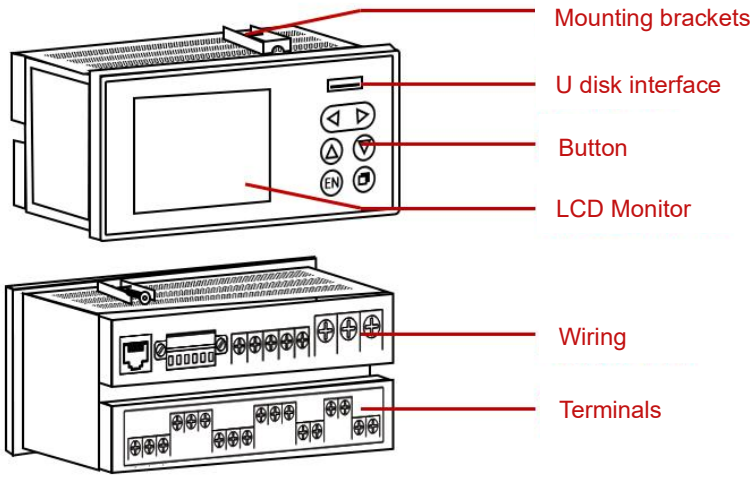
- 4-way universal signal input, mA, V, mV, TC, RTD, etc.
- Support thermocouple input cold junction compensation
- High precision signal input ±0.2%F.S.
- It can record 180 days at 1 minute interval, and the data will not be lost for 10 years
- Channel high and low limit alarm, 4-way relay contact output
- USB 2.0 interface, support instrument data export
- Various forms of data representation
- Standard RS232C/RS485 communication interface, standard ModbusRTU protocol
- With configuration file backup and export function

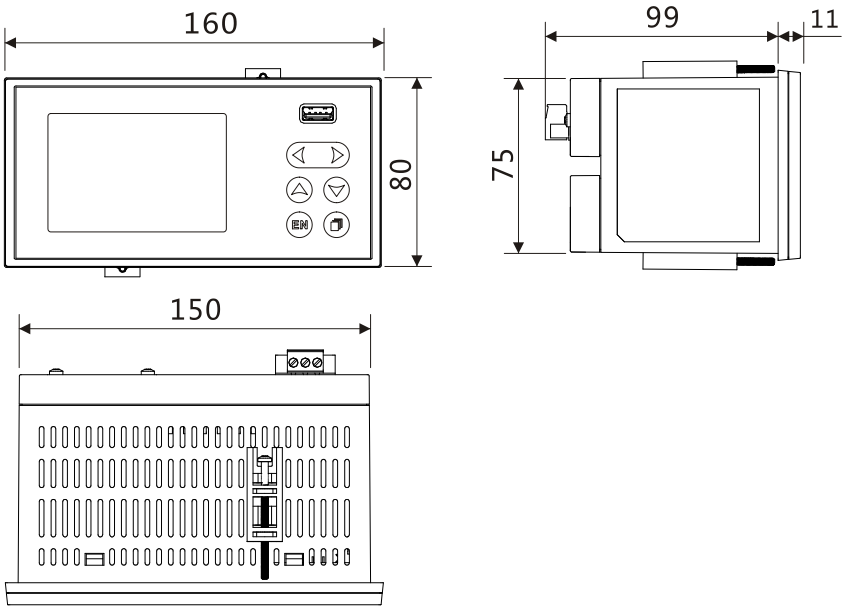
Parameters

Measurement Accuracy	
AC power supply	100VAC ~ 240VAC, 50Hz, air switch specification 1A
DC power supply	24VDC±10%, air switch specification 3A
Power consumption	≤10W
Channel	1-4 way
Signal	Current: 4~20mA 20mA Voltage: 1-5V 5V 10V 20mV 100mV Resistance: 400Ω Thermal resistance: Pt100 Cu50 BA1 BA2 Thermocouple: S R B K N E J T WRE5-26 WRE3-25 F1 F2 Frequency: Fr
Accuracy	≤ 0.2%F.S.
Frequency signal	low-level 0-2V high level 4-24V
Input resistance	Current signal 250Ω
Resistance measurement excitation	Current 0.25mA
Burnout detection current	1uA
Maximum common mode noise voltage	250VACrms(50Hz)
Recording capacity	32Mb built-in, 72 hours (4 channels, 1 second recording interval) 180 days (4 channels, 1 minute recording interval)
Record mode	Loop record
Data saving	Storage period of more than 10 years
Alarm type	High and low limit alarms, 4 per channel
Relay	4-way normally open relay, 250VAC/3A, 30VDC/3A (resistive load)
Analog output	1 channel 4-20mA output, load less than 750Ω
Power distribution	1 channel 24VDC power distribution, maximum output current 60mA
Communication	RS232C or RS485 ModbusRTU protocol Modbus RTU / Modbus TCP protocol
Battery Life	About 10 years (room temperature)
Operating ambient temperature	0℃~ 50℃
Operating environment humidity	0% ~ 85% (no condensation)
Installation location	Indoor
Storage ambient temperature	-10℃ ～ 60℃
Storage environment humidity	0%~ 95%(no condensation)
Installation angle	The horizontal plane is tilted back <30 degrees
Mounting plate thickness	1～12mm

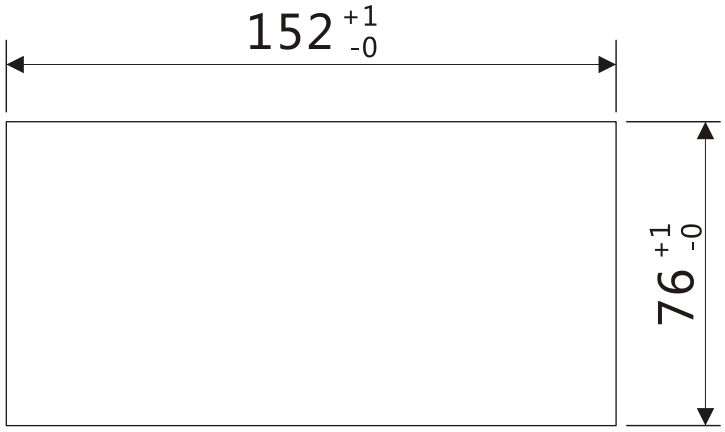
Body material	ABS
External dimensions	160(W)×80(H)×100(D)
Weight	0.5Kg
Display	Monochrome LCD display, 320*200 resolution
Button	6 button design, up, down, left, right, confirm, page

Parameters



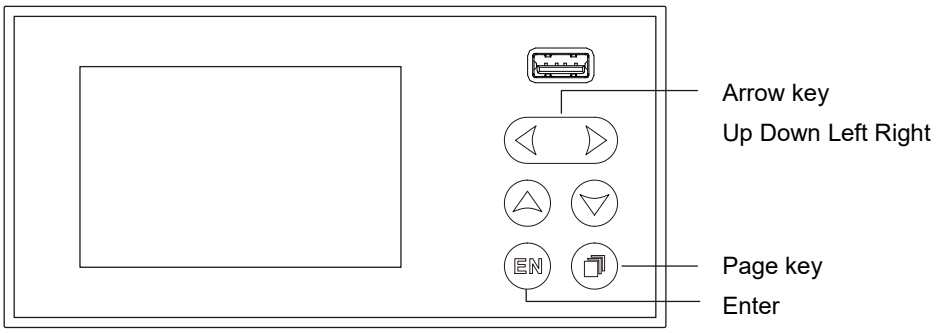


Instrument size (unit: mm)



Hole size (Unit: mm)

Display



Key Description

【Up key】and【Down key】: Switch channels on digital display, bar graph, real-time curve screen; switch parameters or adjust values during configuration.

【Left key】and【Right key】: Move the cursor; digital display, bar graph, real-time curve screen

【Left key】: Trigger key printing.

【Confirm key】: Digital display, bar graph, real-time curve screen switching tour display function;

Edit values or text while configuring, and confirm edits.

【Page key】: Switch between digital display, bar graph, real-time curve, and function query screen;

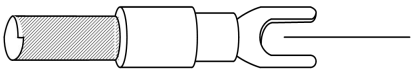
Cancels input during numeric or text editing.

Press the【Left key】and the page button at the same time: enter the configuration login

Wiring

■ Wiring

It is recommended to use crimp terminals with insulating sleeves (M4 screws for power terminals, M3 screws for signal terminals).



Crimp Terminal with Insulating Sleeve

Please observe the following warnings when wiring, otherwise it may cause electric shock or damage the instrument.

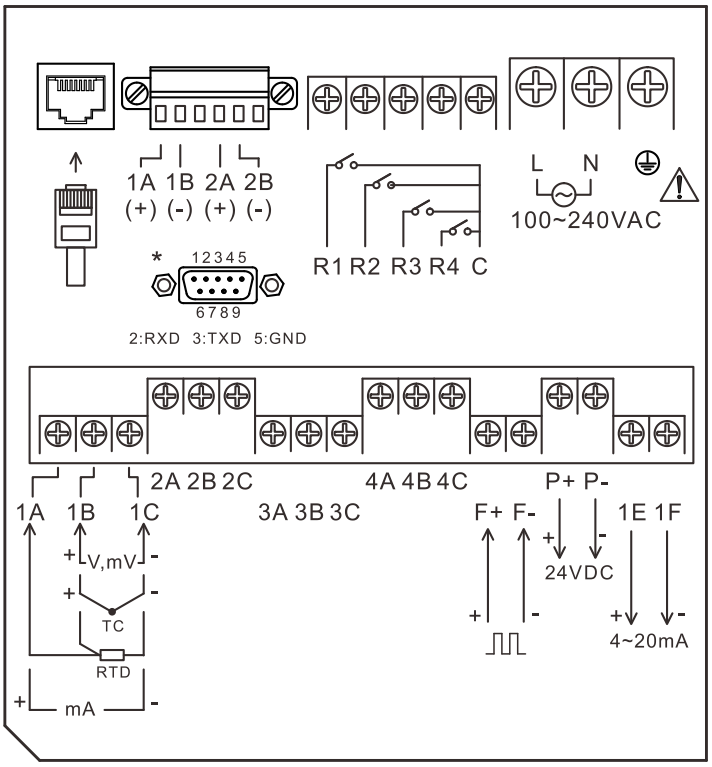
Note
● To prevent electric shock, please confirm that the meter is not powered on before connecting the signal cable. ● To prevent fire, please use double insulated wire. ● Please set an air switch in the power circuit to separate the watch from the main power supply. ● 220VAC power supply air switch specification 1A. ● 24VDC power supply air switch specification 3A.

■ Please be careful not to mix interference in the measurement circuit

Please separate the measurement circuit from the power circuit or ground circuit. The measurement object should not be a source of interference. If it is unavoidable, please insulate the measurement object and the measurement circuit, and ground the measurement sensor. For the interference caused by electrostatic induction, it is better to use a shielded wire. For the interference caused by electromagnetic induction, it is better to splicing the measurement loop wiring at equal distances.

If the input wiring is connected in parallel with other meters, the measured value will be affected by each other.

■ Signal terminal wiring diagram



Terminal	Input voltage
220V L N ⏚	100VAC–240VAC 50~60Hz
24V 24V+ 24V-	24VDC ± 10%

Note: The instrument power supply has two types: 220VAC and 24VDC, please pay attention to the distinction when using

Ordering code

SUP-R200D-01-00-1A-01-R1-B-E0															Description
SUP-R200D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input Channel	01														1
	02														2
	03														3
	04														4
Frequency Input		00													None
		1													Channel 1
Transmitter Output			00												None
			1A												1 channel 4～20mA
SPST Relay Output				00											None
				01											Channel 1
				02											2 Channels
				03											3 Channels
				04											4 Channels
Communication Output					00										None
					R1										RS485
					R2										RS232
					R3										RS232 Printer Interface
Operational Functions						0									None
						B									Flow Accumulation
Power Supply and Distribution Output							E1								220VAC, 1 Channel 24VDC
							E0								220VAC，None
							C1								24VDC, 1 Channel 24VDC
							C0								24VDC，None

Note:
1. Isolated Universal Input, 160mm×80mm, 16GB USB Disk
2. Input Channels + Frequency Input ≤ 4