Datasheet

Paperless recorder

SUP-R8000D

Supmea®

Datasheet

Paperless recorder up to 40 channels universal input
SUP-R8000D paperless recorder

SUP-R8000D Paperless recorder is with outstanding specifications features like high performance and powerful extented functions. With high visibility LCD display, it is easy to read data from the meter. Universal input, high speed of sampling speed and arruracy make it reliable for industry or reaserach applicaiton

Application

- Sewage treatment
- printing and dyeing
- Chemical industry
- Environmental protection
- metallurgy
- medicine
- papermaking

Features

PROS
- 40 channels universal input
- 10.4-inch TFT color LCD display
- Display up to 187 alarm records
- RS485, 4-20mA output, USB Function
- Up to 8 signal output
- 10 years data retention.
- Allocate channels to the groups on the real-time trend and history trend and then display them


Paperless recorder

Supmea®

Parament

EXTERNAL DIMENSION

Dimensions of the instrument　　　　　　　　　　　　　　**Unit：mm**

288

288

26 ← → 110 ← →32

281
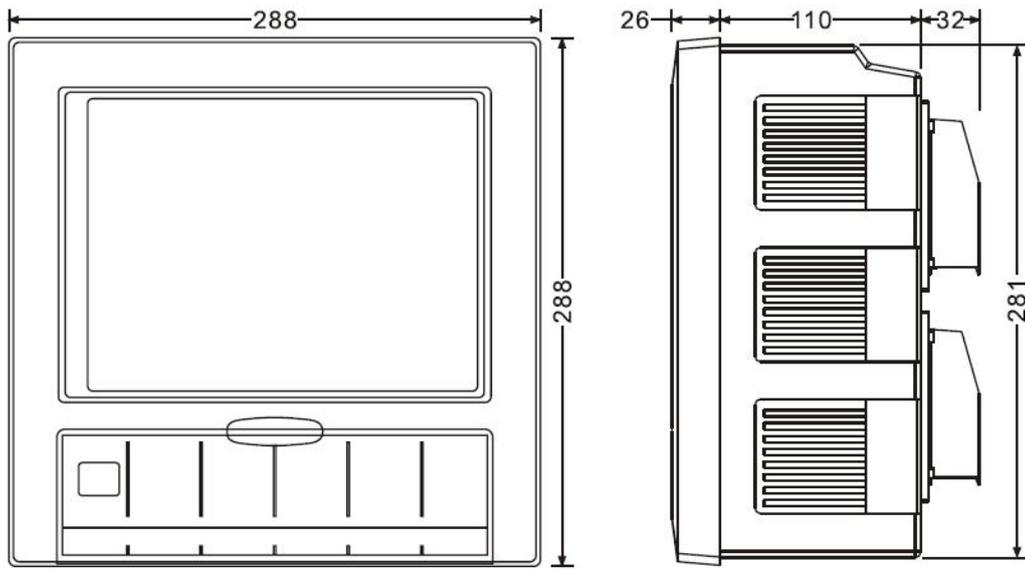
Dimensions of Instrument installation

Hole size of Instrument

282^{+2}_{0}

282^{+2}_{0}

Hole size of container

minimum: 340

minimum: 294

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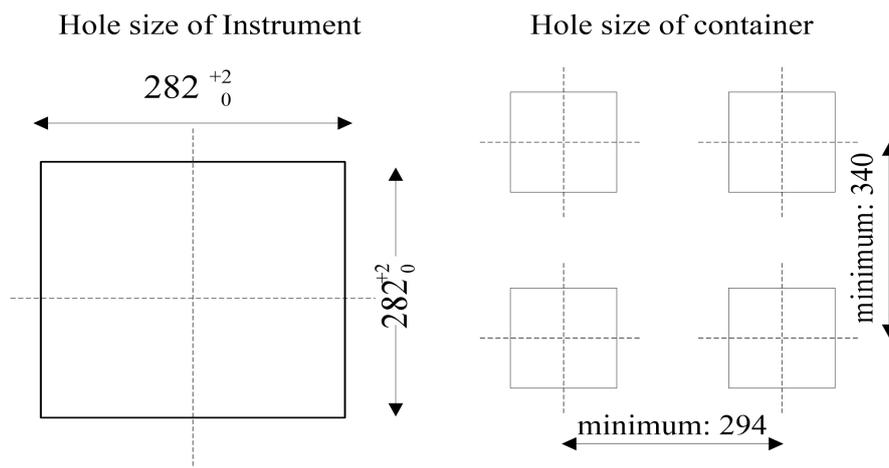
Parameter

Display

Screen	10.4-inch TFT color LCD display (640×480 points)
Brightness	0 ～ 100% adjustment
Display color	256 colors

Standard operating conditions

Power supply	220VAC 50Hz
Ambient temperature	0℃ ～ 50℃
Environment Humidity	0% ～ 85%(non-condensing)
Warm-up Time	30 minutes after power is switched on

Output

Alarm output relay	
Action	Output relay contacts signal from the back panel of the terminal when alarm occurs
Output points	Up to 24 points
Relay electric shock rating	250VAC(50/60Hz)/3A，250VDC/0.1A((load resistance))
Output Type	Normal open or normally closed
Relay Operation	OR operation

RS232C/RS485

Protocol	MODBUS-RTU
Communication rate	1200/2400/4800/9600/19200/38400/57600 bps
Data length	8 bits
Parity method	None / odd parity / even parity

24VDC Power Distribution

|	
Loop	4
Output voltage	22VDC ～ 25VDC（rated output current）
Maximum output current	65mADC(overload protection current: approximately 90mADC)
Allowed Resistence	≤ 750Ω

USB Function	
USB port	Compatible with USB2.0 protocol
Number of ports	1
Power Supply	5V±10%，300mA
Devices can be connected	U disk

Analog signal output	
Output type	4-20mA
Output channel	Up to 8
Allowed Resistence	$\leqslant$ 750 Ω

NAMES OF PARTS AND FUNCTIONS

Front Panel
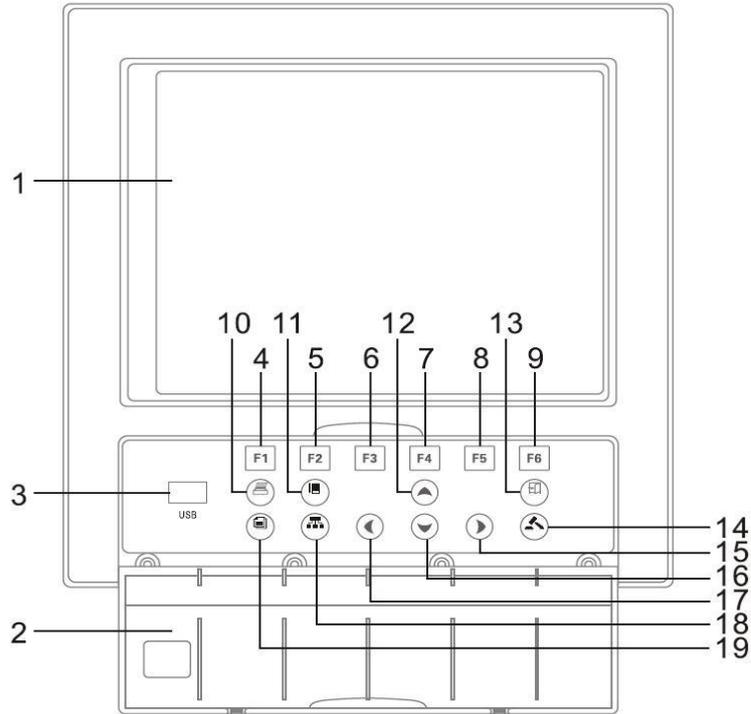
1. LCD Screen
Display various operation screens such as the trend display and the setup screen to configure the instrument.
2. Front Cover
Open this cover to access the keys or inserting or removing the external storage medium such as the USB disk.
Open the cover by catching the center of the top edge of the cover and pulling it toward you. Keep the cover closed
at all times except when accessing the keys and the external storage medium.
3. USB port
USB port, insert the U disk to backup data for use.
4~9 ：Functional key F1~F6
Functional key F1 ~ F6, each page has its own special features, which have been marked in the screen below.
10. PRINT key
Enter the data print screen.
11. RECORD Key
There has been no definition of this key so far.
12. UP key
Used to increase the value that cursor indicated.
13 EXIT key
Used to exit the screen
14. ENTER key
Used to execute the function of button that cursor indicated.
15. RIGHT key
Used to move cursor to right
16. DOWN key
Used to decrease the value that cursor indicated.
17. LEFT key
Used to move cursor to the left
18. CONFIGURATION key
Used to enter the configuration screen.
19. BACKUP key
Used to enter the data backup screen.

Rear Panel
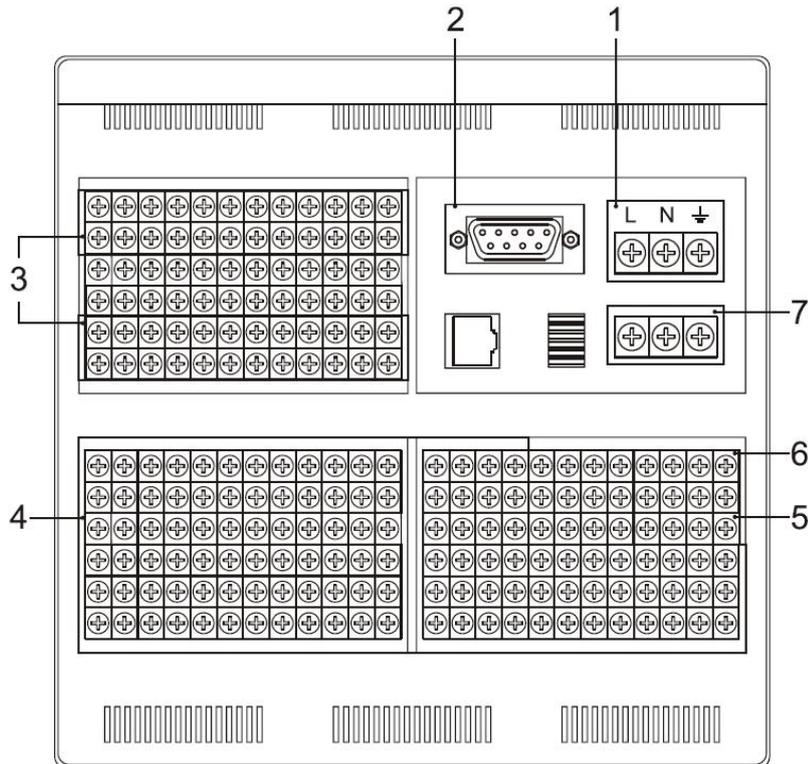
1. Power terminals
Connect the power cord and ground protective line.
2.RS232 Port
RS-232 port is used to connect the interface cable.
3. Alarm output terminal
Connect relay alarm output signal line.
4. I/O signal terminals
Connect the input signal cable of the item being measured or output signal cable of analog current.
5. 24 VDC Power Supply for Transmitter
Provide 24 VDC power line to sensor.
6. Digital input terminals
Connect the input digital signal cable.
7. RS485 Interface
RS485 interface for connecting communication cables.

SCREEN DISPLAY
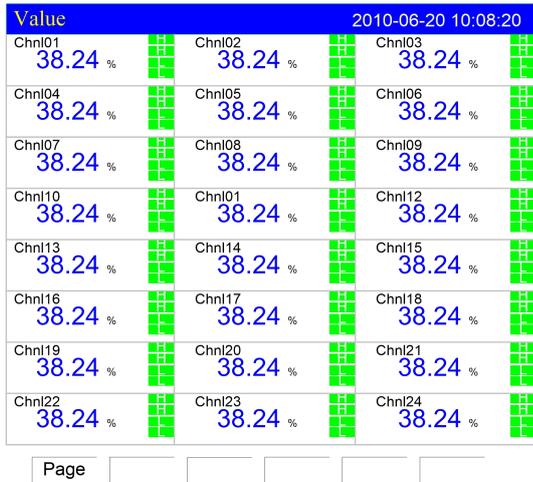
DIGTAL DISPLAY SCREEN
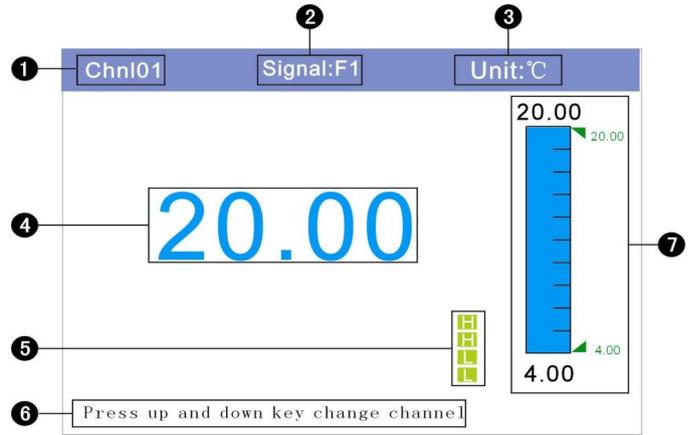
LARGER DISPLAY SCREEN
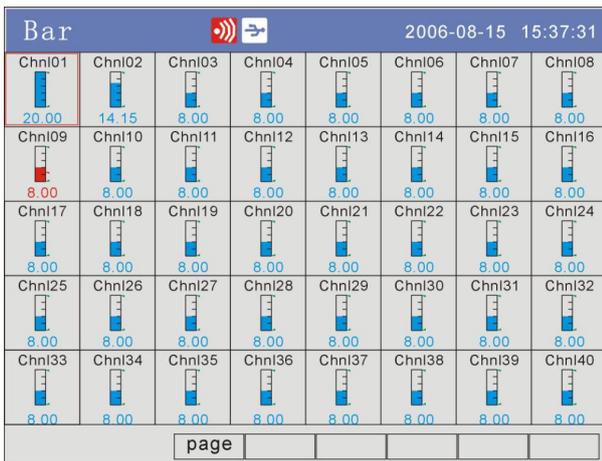
BAR GRAPH DISPLAY
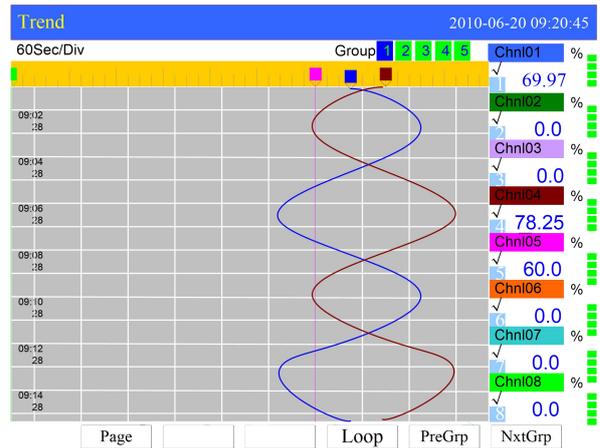
REAL-TIME TREND SCREEN (vertical)
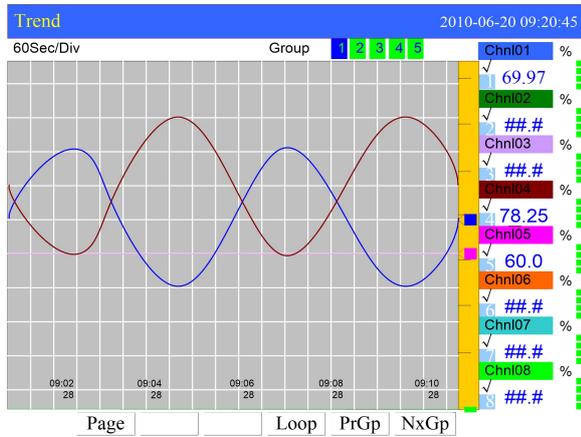
REAL-TIME TREND SCREEN (horizontal)
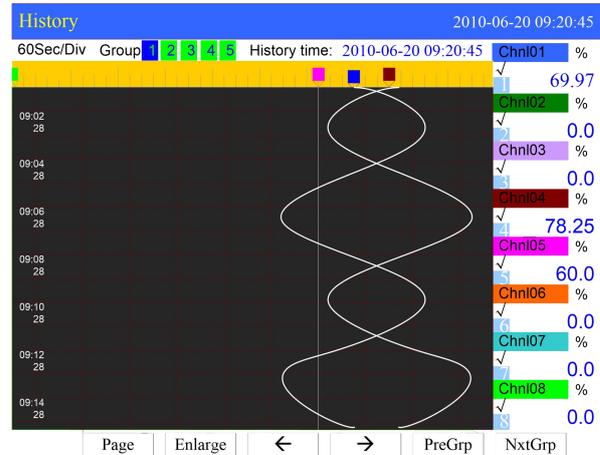
HISTORY TREND SCREEN

Parameter

Installation Procedure

The instrument should be mounted on a steel panel of thickness from 2 mm to 12 mm.
1. Insert the instrument from the front side of the panel.
2.As shown in the figure below, mount the instrument to the panel using the mounting brackets that came with the package.
●Use two brackets under the cover of the instrument
●The screws of instrument panel mounting bracket are the standard M4 screws.

Installation diagram

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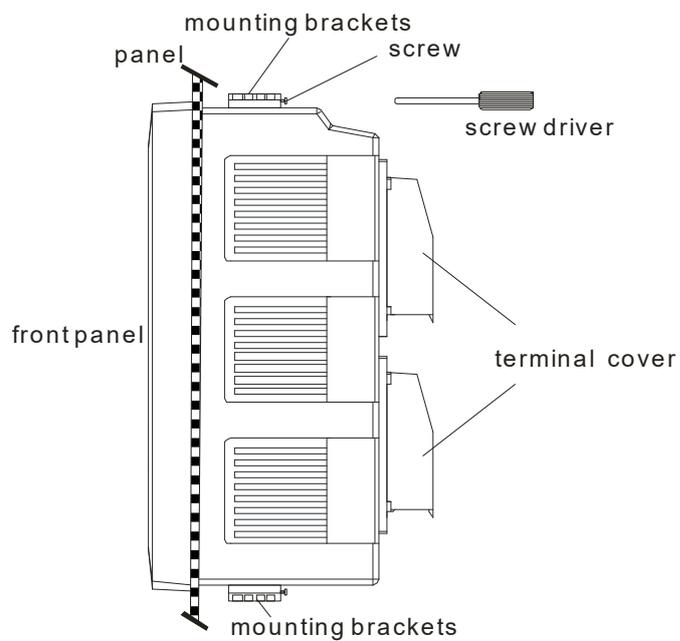
The position of input / output signal terminal in the tail terminal

input / output
signal terminal
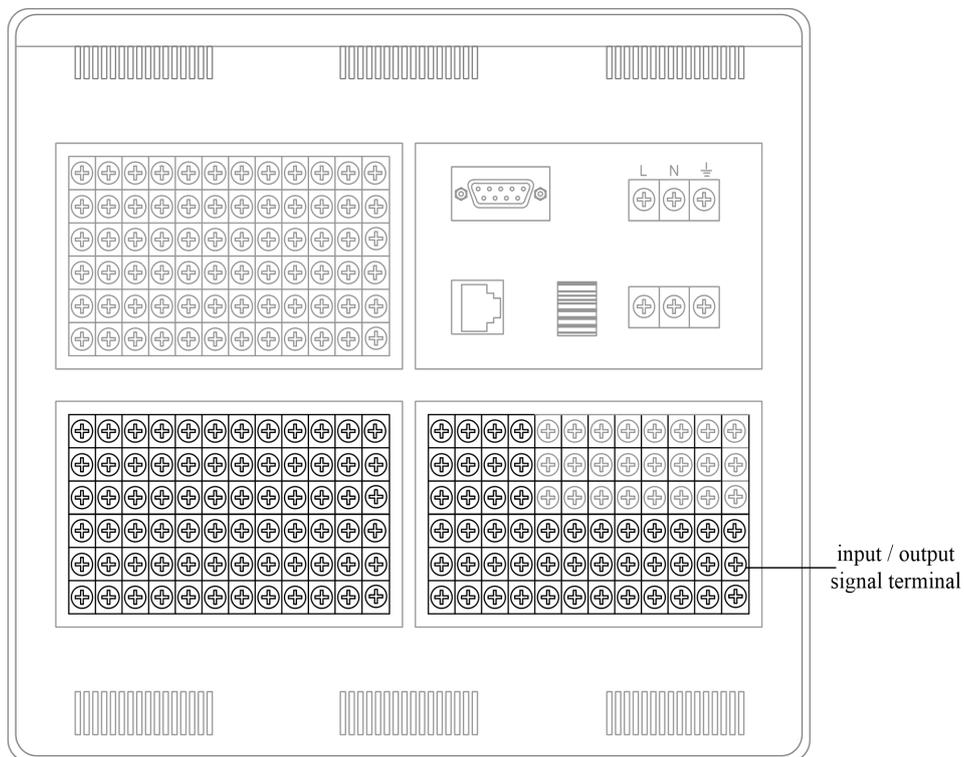
Input / output signal channel arrangement

13A	14A	15A	16A	17A	18A	19A	20A	21A	22A	23A	24A
13B	14B	15B	16B	17B	18B	19B	20B	21B	22B	23B	24B
13C	14C	15C	16C	17C	18C	19C	20C	21C	22C	23C	24C
1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A
1B	2B	3B	4B	5B	6B	7B	8B	9B	10B	11B	12B
1C	2C	3C	4C	5C	6C	7C	8C	9C	10C	11C	12C

37A	38A	39A	40A								
37B	38B	39B	40B								
37C	38C	39C	40C								
25A	26A	27A	28A	29A	30A	31A	32A	33A	34A	35A	36A
25B	26B	27B	28B	29B	30B	31B	32B	33B	34B	35B	36B
25C	26C	27C	28C	29C	30C	31C	32C	33C	34C	35C	36C

Wiring diagram

DC voltage input

+   +
DC voltage input
-        -

DC voltage input

+   +
DC voltage input
-        -

frequency input

+   +
frequency input
-        -

DC current output

limit to 25-28 channel
limit to 33-36 channel
+   +
DC current output
-        -

RTD signal input

A
B
C
A
C   B

wire resistence: Maximum 10Ω/ per wire, the resistence of 3 wires should be the same.DC current input

RTD signal input

B
C

compensation wire
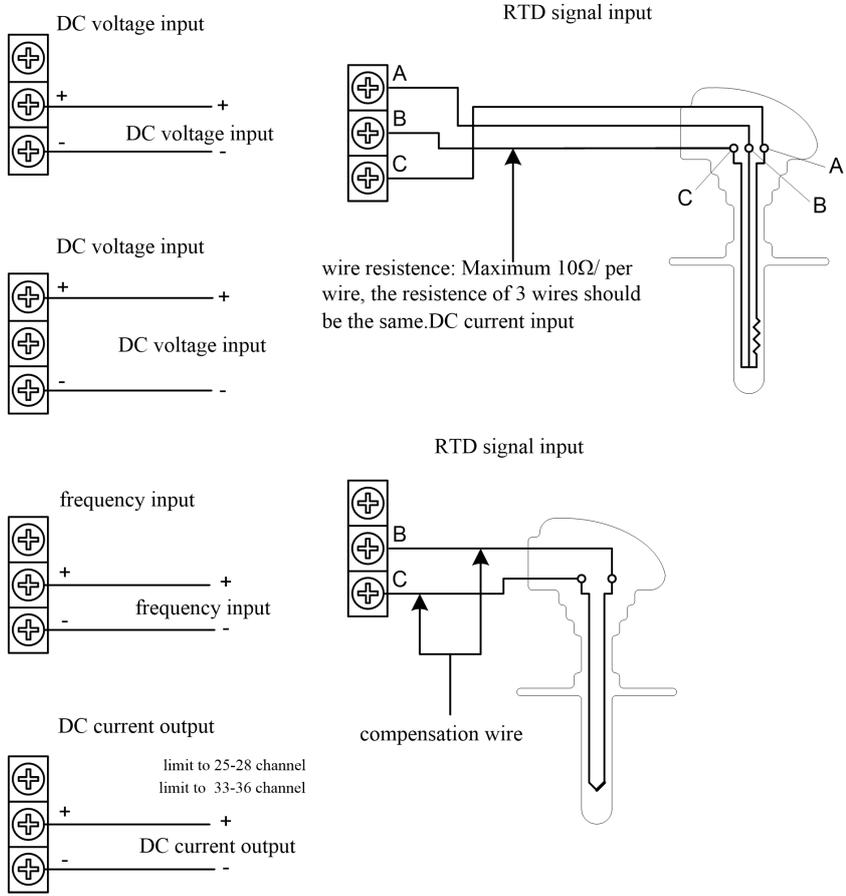
Note

Order 4-way current output, output channels 33-36 correspondingly transmit 1-4.

Order 8-way current output, output channels 25-28 transmit correspondingly 1-4, and output channels 33-36 correspondingly transmit 5-8.