

FEATURES

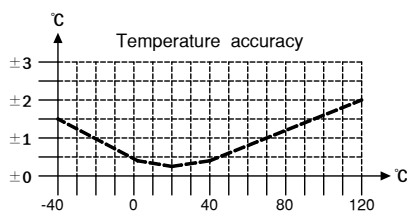
- Relative humidity and temperature sensors
- Excellent long-term stability
- High accuracy(1.8% RH)
- Selectable moving average filter
- Channel isolation current output
(2-wire 4.00~20.00mA) & output scaling
- 4 Digit LCD for parameter alteration and
PV output on the spot
- Temperature and humidity according to
set up cycle alternately display(1~10sec)
- Sensor compensation(Humidity and temp)



SPECIFICATIONS

► Temperature

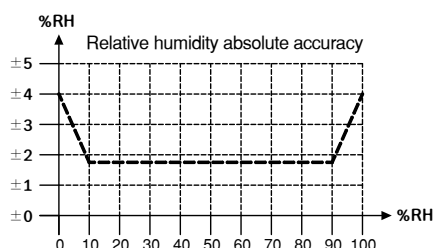
- Element : Micro-machining CMOS
- Accuracy : at 25°C $\pm 0.3^{\circ}\text{C}$



- Temperature detection range
CMOSens[K] : -40.0~120.0°C
Pt100Ω : -200~600°C
- Response time : 1/e(63%)

► Humidity

- Element : Micro-machining CMOS
- Accuracy :
 $\pm 1.8\% \text{ RH}$ at 25°C in the range of 10 to 90% RH

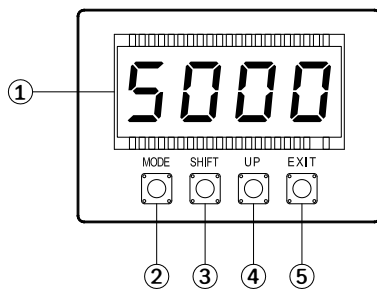


- Humidity detection range : 0.0~100.0%RH
- Response time : 1/e(63%) at 25°C, 1m/s air
- Long term stability : < 0.5% RH/yr
- Type of fluid : Air and neutral gases

► Etc

- Moving average filter : Selectable
(None, 4, 8, 16, 32)
- Power : DC 9~35V
- Output : PT 100Ω DC 4.00~20.00mA
load limit(Vsp 9V)/0.022=RΩ
- Operation condition : Operating Temp/Humidity
Room : -10~60°C, 10~90%
Duct : -10~60°C, 10~100%
Storage Temp/Humidity : -20~70°C, 5~95%
- Case material
Room : ABS + SUS 316
Duct : Al + SUS 316

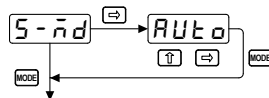
PARTS NAME



- ① Measured value display
- ② **MODE** Key :
Storage the set data and change the operation menu
- ③ **⇐⇒** (Shift) Key :
Enter into the data setting mode and modify the changed location
- ④ **↑** (Up) Key :
Change the data value
- ⑤ **EXIT** Key : Out of mode

MAJOR FUNCTIONS

► **Automatic, manual alteration function**



► **Customer is mode(Auto, Temperature, Humidity) selection that wish to do display**

► **Auto(AUT o)** : Temperature and humidity according to set up cycle alternately display(1~10sec)

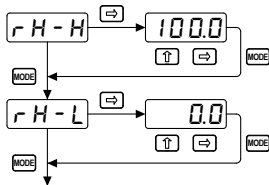
► **Temperature(TEMP)** : Temperature display

► **Humidity(rHU m)** : Humidity display

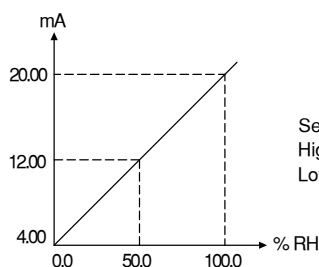
► **Output scaling function**

(Humidity 0.0~100.0% RH)

This function can change the 4.00~20.00mA value as the output scale.(rH-H)



Ex) In case of display value 0.0~100.0% RH,
Output 4.00~20.00mA



Setting to
High Out Scale(rH-H) : 100.0
Low Out Scale(rH-L) : 0.0

► **Sensor compensation function**

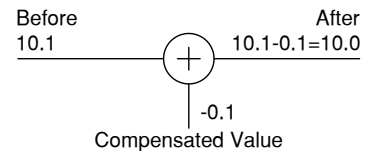
The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 10.1% RH

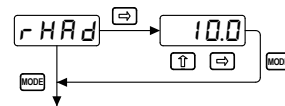
After sensor adjust

= measured value + compensated value

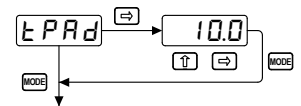
= 10.1 - 0.1 = 10.0%RH



* **Humidity**

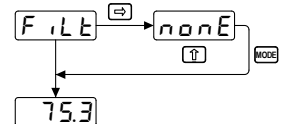


* **Temperature**



► **Filter function**

Filter is moving average filter and it has 4 kinds of function.



non E

It displays the change of input without filter.

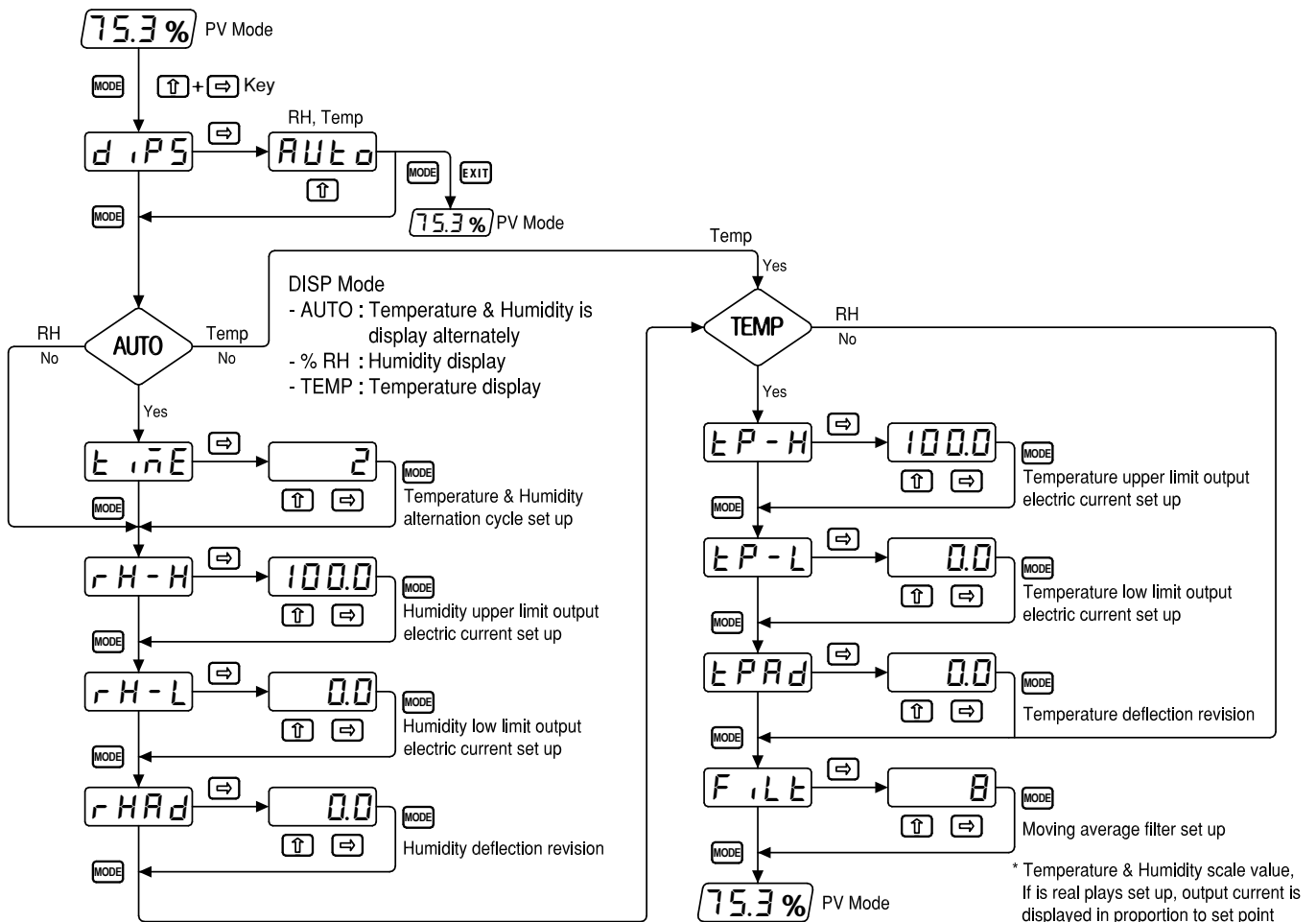
Av 4, 8, 16, 32

It displays in recent input No 4,8,16,32 sample average.

Setting filter function delays reponse.

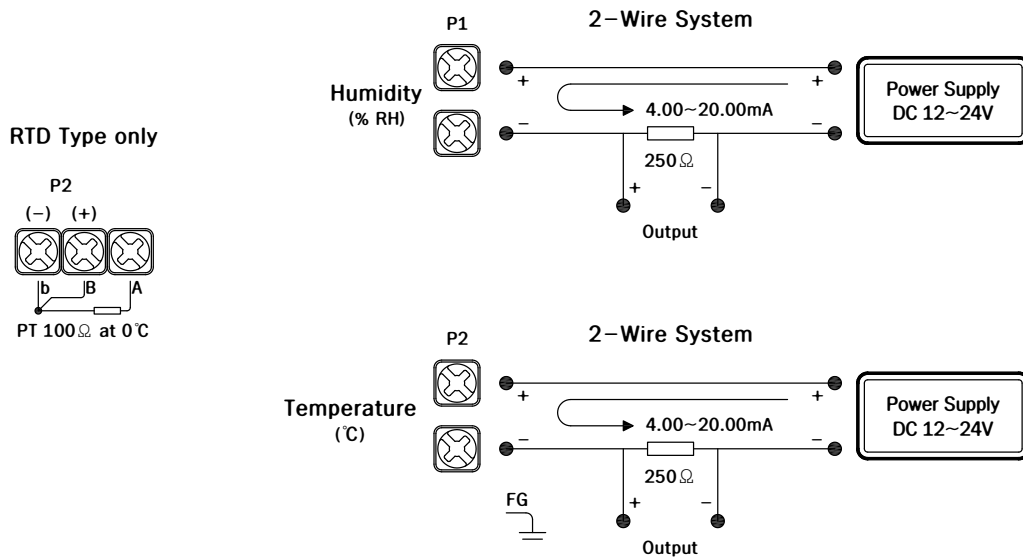
Do not use filter when high speed response is needed.
When output and display value are changed by irregular input, it is possible to get regular input and display value by using filter function.

Buy instrument and user is mode that play set up according to use purpose.
Data set up method refers each part button name.

**ORDERING CODE**

Model	Type	Output	Description
NT 51XXM			Duct type(Temp only)
NT 52XXM			Room type
	1		Temperature
	2		Humidity
	3		Temperature & Humidity
		1	RTD(Temperature only)
		2	DC 4.00~20.00mA(Humidity only)
		3	RTD(Temperature), 4.00~20.00mA(Humidity)
		4	DC 4.00~20.00mA(Temperature & Humidity)
		5	1~5V(Temperature & Humidity)
		Z	Lead wire

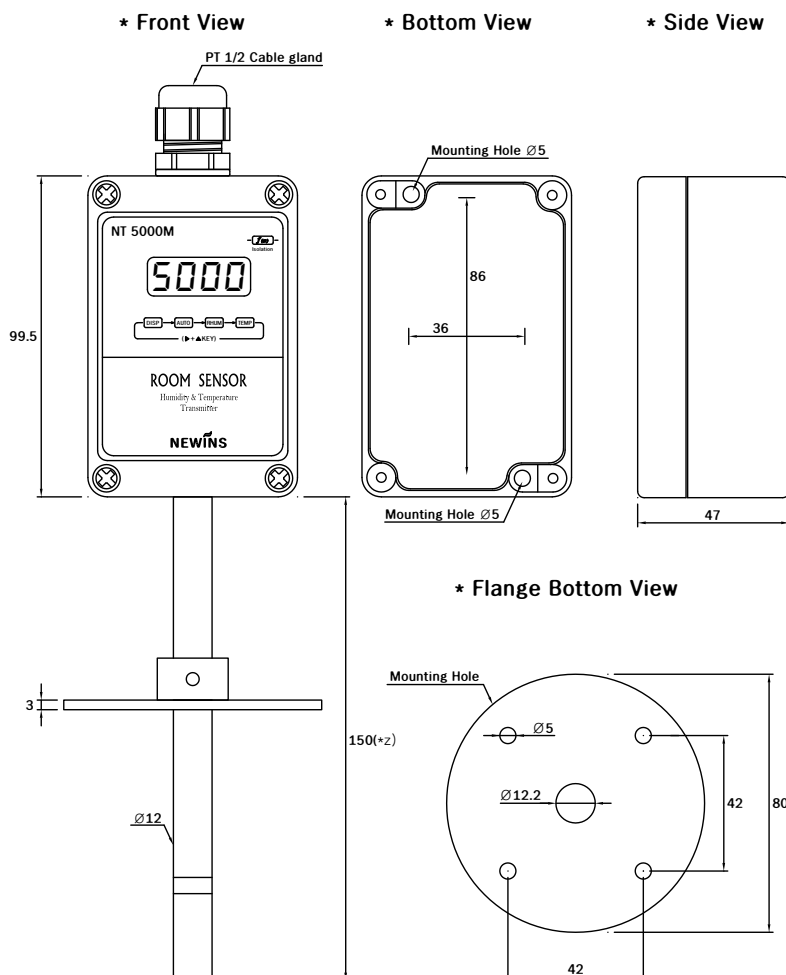
TERMINAL DIAGRAM



DIMENSION & PANEL CUT

Unit : mm

※ Duct Type



※ Room Type

