

FEATURES

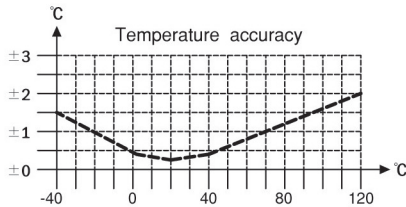
- Relative humidity and temperature sensors
- Excellent long-term stability
- High accuracy(1.8% RH)
- Selectable moving average filter
- Channel isolation current output (2-wire 4.00~20.00mA) & output scaling
- 4 Digit LCD for parameter alteration and PV output on the spot
- 4 Digit FND for parameter 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

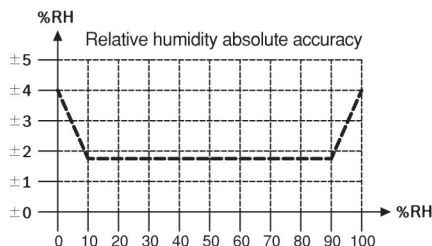
- Element : Micro-machining CMOS
- Accuracy : at 25°C ±0.3°C



- 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 : ±1.8% RH at 25°C in the range of 10 to 90% RH



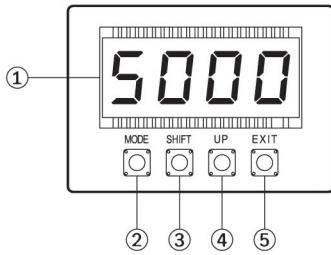
- Humidity detection range : 0.0~100.0%RH
- Response time : 1/e(63%) at 25°C, 1m/s air
- Long term stability : < 0.5% RH/yr
- Type of fluid : Air and neutral gases

▶ Etc

- Moving average filter : Selectable (None, 4, 8, 16, 32)
- Power : DC 9~35V
- Output : PT 100Ω(Temp), 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
- Weight  
Room Type : 160g  
Duct Type : 400g

A  
B  
C  
D  
E  
F  
G  
H  
I  
J

PARTS NAME

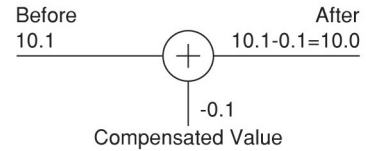


- ① Measured value display
- ② **MODE** Key :  
Storage the set data and change the operation menu
- ③ **⇐⇒** (Shift) Key :  
Enter into the data setting mode and modify the changed location
- ④ **↑** (Up) Key :  
Change the data value
- ⑤ **EXIT** Key : Out of mode

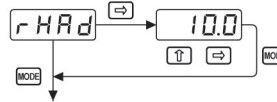
▶ Sensor compensation function

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

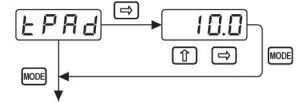
Ex) Before sensor adjust = 10.1% RH  
 After sensor adjust  
 = measured value + compensated value  
 = 10.1 - 0.1 = 10.0%RH



\* Humidity

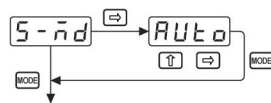


\* Temperature



MAJOR FUNCTIONS

▶ Automatic, manual alteration function



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

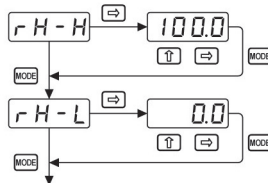
▶ **Auto(AUto)** : Temperature and humidity according to set up cycle alternately display(1~10sec)

▶ **Temperature(tEñP)** : Temperature display

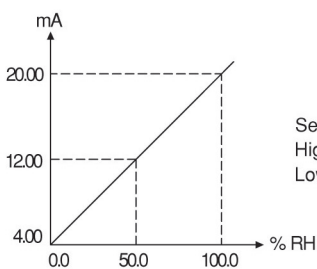
▶ **Humidity(rHñ)** : Humidity display

▶ 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)



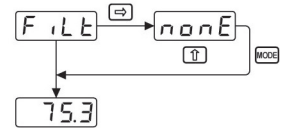
Ex) In case of display value 0.0~100.0% RH,  
 Output 4.00~20.00mA



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

▶ Filter function

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



**nonE**

It displays the change of input without filter.

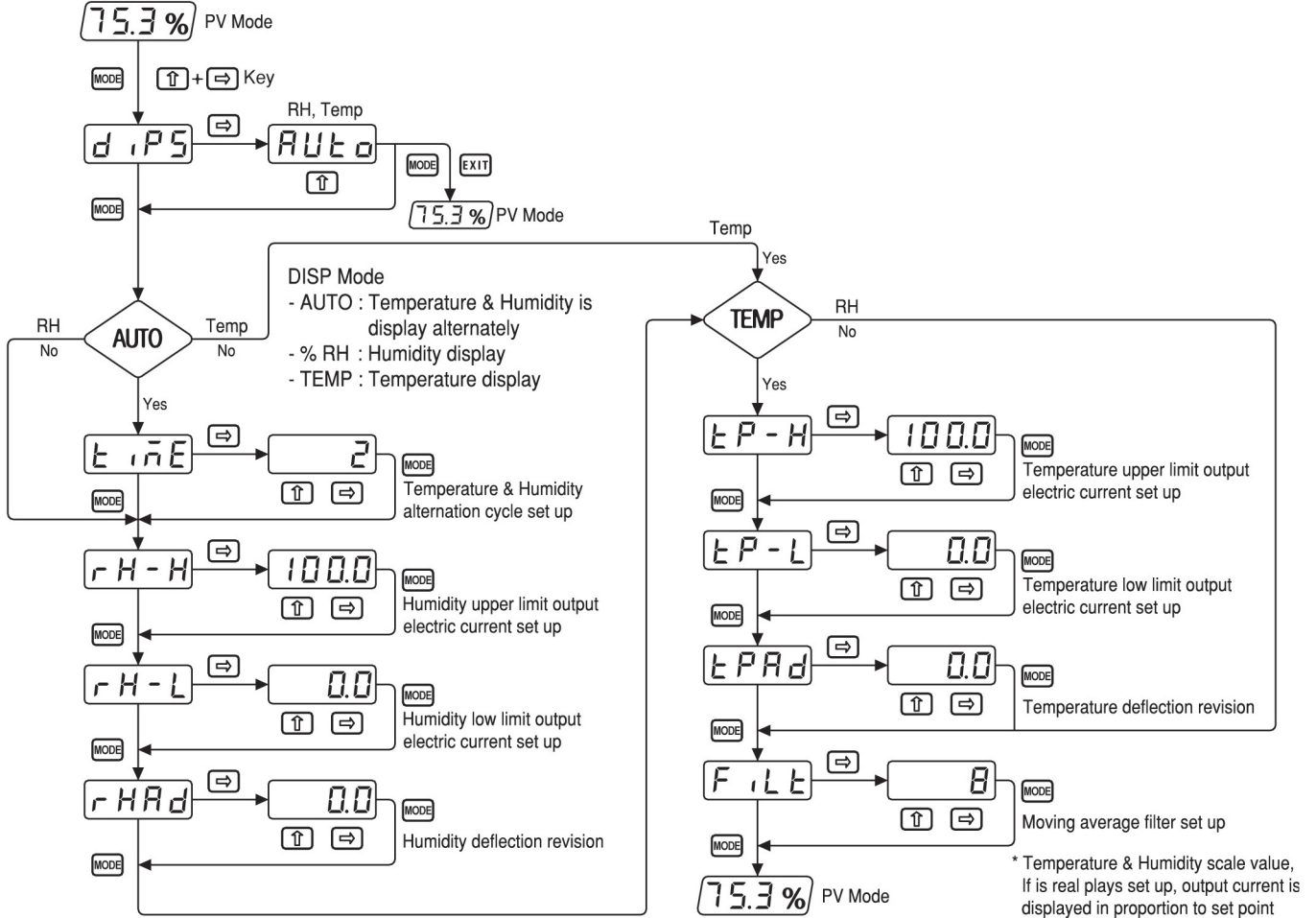
**Au 4, 8, 16, 32**

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.

OPERATION MODE

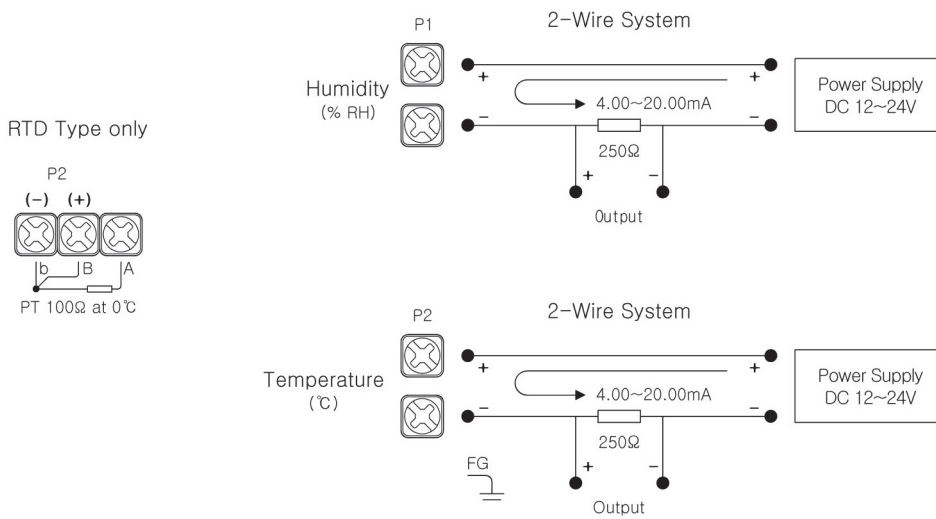
Buy instrument and user is mode that play set up according to use purpose.  
Data set up method refers each part button name.



ORDERING CODE

Model			M	Description
NT51				Duct type
NT52				Room type
Type	1			Temperature only
	2			Humidity only
	3			Temperature & Humidity (Dew Point)
	4			Etc
Output		1		RTD (Temperature only)
		2		DC 4.00~20.00mA (Humidity only)
		3		RTD (Temperature), DC 4.00~20.00mA (Humidity)
		4		DC 4.00~20.00mA (Temperature & Humidity)
		5		1~5V (Temperature & Humidity)
		6		Etc
		z		Lead Wire
Flange			0	None
			1	With Flange

TERMINAL DIAGRAM



DIMENSION & PANEL CUT

Unit : mm

