

FEATURES

- Multi-range input (TC, RTD, Volt, mV, mA, ETC.)
- High accuracy 16bit A/D converter
- DC24V 2-Wire loop power
- Isolation current output (DC 4.00~20.00mA) & Output scaling



SPECIFICATIONS

- ▶ **Measuring and displaying interval** :
200ms(mV, Volt, mA type)
400ms(TC, RTD type)
- ▶ **Input resistance** : Volt type 400kΩ, Other type 1MΩ
- ▶ **Signal source resistance** :
PT100Ω...30Ω/Line, Others type 300Ω/Line
- ▶ **CMRR(Common Mode Rejection Ratio)** : 140dB or more
- ▶ **NMRR(Normal Mode Rejection Ratio)** : 60dB or more
- ▶ **Moving average filter** : Selectable(None 4, 8, 16)
- ▶ **Accuracy** : ±0.25% FS
- ▶ **Power** : DC 9~35V
- ▶ **Output** : 2-wire DC 4.00~20.00mA
load limit($V_{sp9V}/0.022=R_{\Omega}$)
- ▶ **Operating condition**
Operating Temp/Humidity : -10~60°C, 10~90%
Storage Temp/Humidity : -20~70°C, 5~95%
- ▶ **Case material** : Plastic (ABS)
- ▶ **Etc**
Weight : 1.5kg
Mounting : Filed Mount

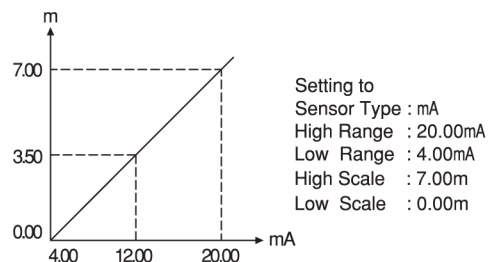
INPUT TYPE

	Sensor Type	Range	Scale	Simbol
TC	B(PR 30%)	0~1800°C	-	ℓℓ-b
	R(PR 13%)	0~1750°C	-	ℓℓ-r
	S(PR 10%)	0~1750°C	-	ℓℓ-S
	K(CA)	-200~1350°C	-	ℓℓ-ℓ
	E(CRC)	-200.0~700.0°C	-	ℓℓ-E
	J(IC)	-199.9~800.0°C	-	ℓℓ-J
	T(CC)	-199.9~400.0°C	-	ℓℓ-ℓ
Volt	mV	-100.0~100.0mV	-1999~9999	ñu
	Volt	-10.0~10.0V	-1999~9999	u
mA	mA	4.00~20.00mA	-1999~9999	ñR
PT	Pt100Ω	-199.9~800.0°C	-	d-Pℓ
	JPt100Ω	-199.9~800.0°C	-	J-Pℓ

* mA input needs 20Ω 0.05% 25ppm resistance spiral on outside

MAJOR FUNCTIONS

- ▶ **Display scaling function(mV, Volt, mA only)**
This function changes and sets the display value according to scale and input range.
Ex) In case of input range 4.00~20.00mA and Level 0.00~7.00m



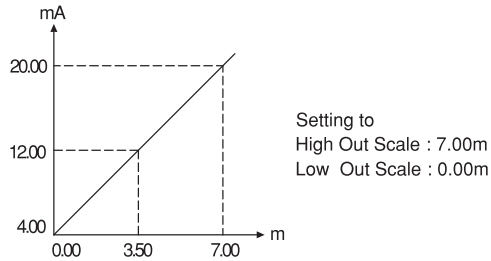
2선식 온도 변환기

2-WIRE SMART TEMP. TRANSMITTER

▶ Output scaling function

This function can change the 4.00~20.00mA value as the output scale.

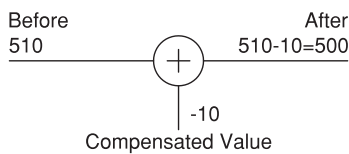
Ex) In case of display value 0.00~7.00m,
Output 4.00~20.00mA



▶ 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 = 510°C
After sensor adjust
= measured value + compensated value
= 510 - 10 = 500°C



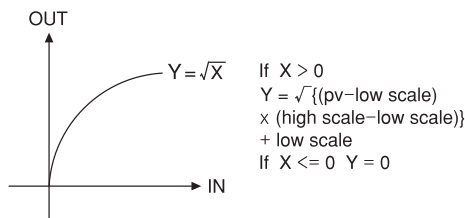
▶ Function(mV, Volt, mA type only)

L in

Pass the input as it is.
Used for general input type and linearity input.

5-rt

Pass the input after $\sqrt{\quad}$. Used for flow rate by orifice.



L int

Like level measuring, when it does not display measuring under zero, it always can display zero by using limit function.

▶ Filter function

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

nonE

It displays the change of input without filter.

RL 4, B, 16

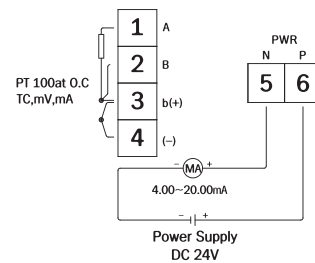
It displays in recent input No 4,8,16 sample average.
Setting filter function delays reponse.
Do not use filter when high speed response is needed.
When output and display value are changed by irregular input, it is possible to get regular input and display value by using filter function.

ORDERING CODE

NT 53			Description
Type	0		Head Mounted
Indicator	0		None

* Temperature sensor is separate way subject of discussion

TERMINAL DIAGRAM



DIMENSIONS & PANEL CUT

