

2선식 온도 변환기

2-WIRE SMART TEMPERATURE TRANSMITTER(HEAD MOUNT TYPE)

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 400k Ω , Other type 1M Ω
- ▶ Signal source resistance :
PT100 Ω ...30 Ω /Line, Others type 300 Ω /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 : $\pm 0.25\%$ FS
- ▶ Power : DC 9~35V
- ▶ Output : 2-wire DC 4.00~20.00mA
load limit(V_{sp9V})/0.022= R_{Ω}
- ▶ Operating condition
Operating Temp/Humidity : -10~60 $^{\circ}\text{C}$, 10~90%
Storage Temp/Humidity : -20~70 $^{\circ}\text{C}$, 5~95%
- ▶ Case material : Plastic (ABS)
- ▶ Etc
Weight : 30g
Mounting : Filed Mount

INPUT TYPE

Sensor Type		Range	Scale	Symbol	Etc
TC	B (PR 30%)	0 ~ 1800℃	-	℃-b	STD
	R (PR 13%)	0 ~ 1750℃	-	℃-r	
	S (PR 10%)	0 ~ 1750℃	-	℃-S	
	K(CA)	-200 ~ 1350℃	-	℃-K	
	E(CRC)	-200.0 ~ 700.0℃	-	℃-E	
	J(IC)	-199.9 ~ 800.0℃	-	℃-J	
	T(CC)	-199.9 ~ 400.0℃	-	℃-t	
	N	0 ~ 1300.0℃	-	℃-n	
mV	mV	-100.0 ~ 100.0mV	-1999 ~ 9999	mV	
PT	PT100Ω	-200 ~ 630℃	-	d-Pt1	
		-199.9 ~ 630.0℃	-	d-Pt2	
	JPT100Ω	-199.9 ~ 800.0℃	-	J-Pt	
Volt	Volt	-10.0 ~ 10.0V	-1999 ~ 9999	V	OPTIO N
mA	mA	4.00 ~ 20.00mA	-1999 ~ 9999	mA	

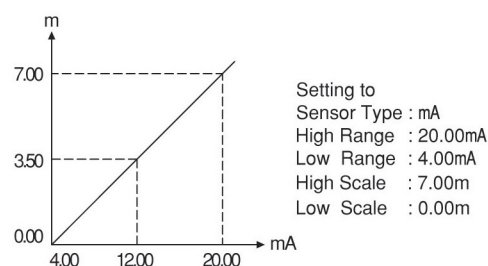
* mA input needs 20 Ω 0.05% 25ppm resistance spiral on outside

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

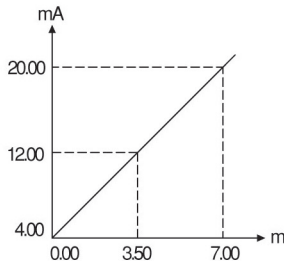
2-WIRE SMART TEMPERATURE TRANSMITTER(HEAD MOUNT TYPE)

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



Setting to
High Out Scale : 7.00m
Low Out Scale : 0.00m

Sensor compensation function

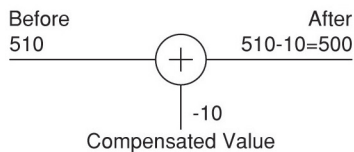
The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 510℃

After sensor adjust

= measured value + compensated value

= 510 - 10 = 500℃



Function(mV, Volt, mA type only)

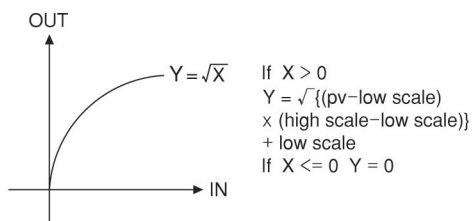
L in

Pass the input as it is.

Used for general input type and linearity input.

rat

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



Filter function

Filter

This function is moving average filter.

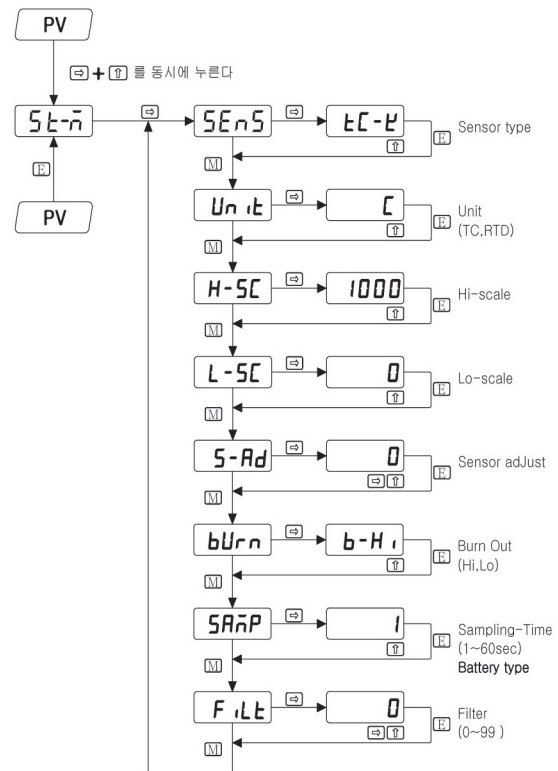
0001 ~ 0099

It displays in recent input No 1~99 sample average.

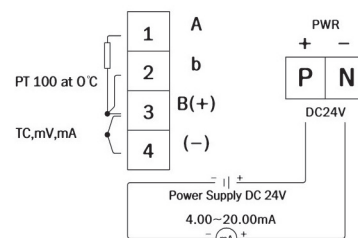
Setting filter function delays response.

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.

SET UP MODE



TERMINAL DIAGRAM



DIMENSION & PANEL CUT

