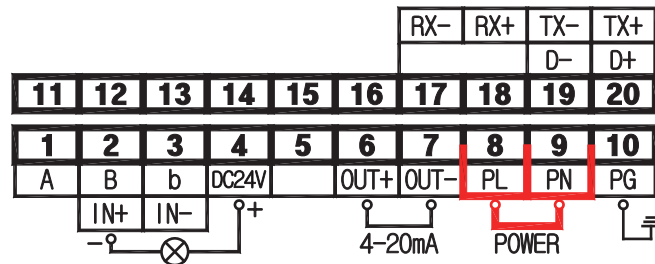


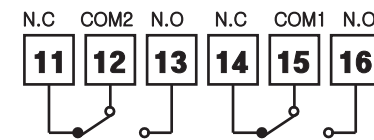
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Connection diagram

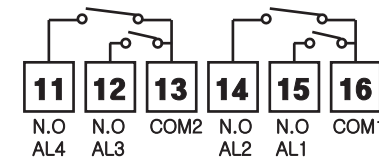
※SMU-30□□



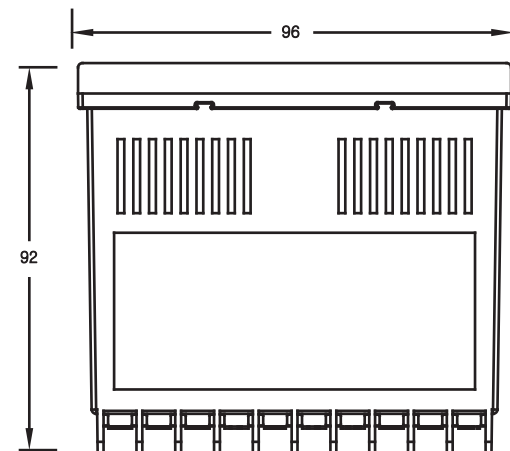
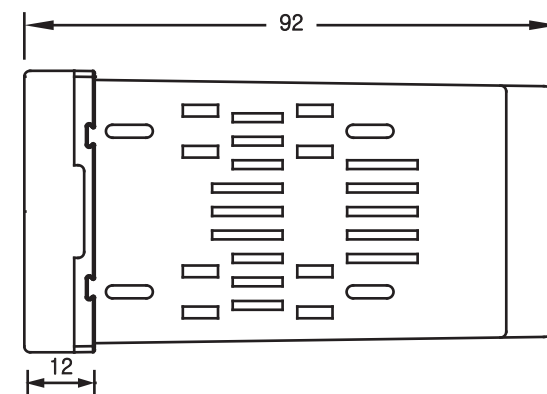
※SMU-32□□



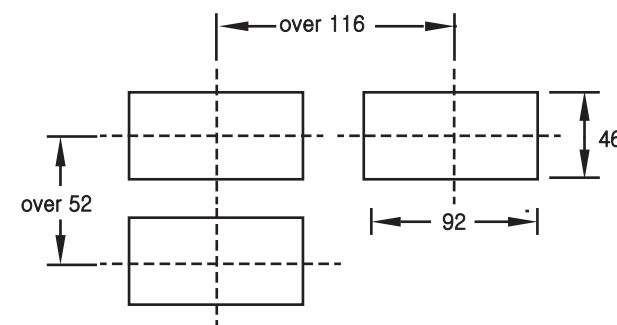
※SMU-34□□



Dimensions



※Pannel processing dimensions



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A G E N C Y

Multi Input Indicator

high performance, high precision

SMU-3000 SERIES



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MULTI INPUT INDICATOR



Feature

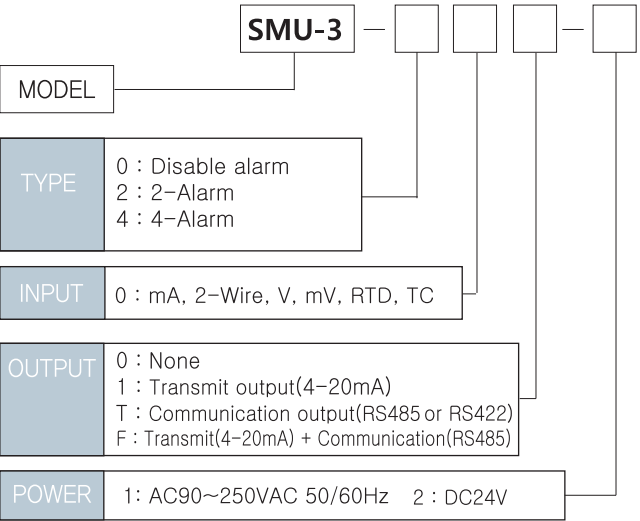
- Multi Input function can receive various type signal. (T/C, RTD, mA, mV, V, 2-wire)
- Because of adoption of high sensitive 16 bit a/d converter, practically the accuracy is within the span of $\pm 0.2\%$
- Install 2Point and 4Point alarm output
- It is possible to isolated 4-20mA output install and scaling.
- RS485/422 Modbus communication is available.
- 2 Type setting menu (Basic + Function)

Specifications

Power supply voltage		AC90~250V_50~60Hz or DC 24V
Power consumption		4VA
Display		-9999~9999 / 7Segment FND / RED
Input class	Thermocouple	B, C, E, J, K, L, N, P, R, S, T, U (12 type)
	RTD	Pt50Ω, Pt100Ω, JPt100Ω, Cu100Ω (4 type)
	Analogue	Voltage : $\pm 10.00V$, $\pm 50.00mV$, $\pm 1.000V$ (3 type) Current : 4-20mA, 2-Wire (2 type)
Auxiliary output	Alarm output	2 Alarm : 250VAC 3A(SPDT,1C), 4 Alarm : 250VAC 3A(SPST,1A)
	Transmit output	4-20mA DC (ISOLATED) load resistance : less than 600Ω
	Communication output	RS-422, RS485
Bits per second (BPS)		2400 / 4800 / 9600 / 19200 / 38400
Transmission distance		1.2Km
Protocol		Modbus RTU
Parity		None
Stop Bit		1Bit
Data Bit		8Bit
Sensor power supply		DC24V / 30mA ($\pm 5\%$ or less)
Setting mode		Setting with KEY in front / Setting with RS-485 communication
Sampling period		DC, TC Type : 200ms RTD Type : 400ms
Accuracy		$\pm 0.2\%$ Ful Scale, ± 1 digit
Temperature coefficient		$\pm 0.015\%/^{\circ}C$
CMRR (Common Mode Rejection Ratio)		140dB or less
NMRR (Nomal Mode Rejection Ratio)		50dB or less
Set precision		10^{-1} , 10^{-2} , 10^{-3} or none
Power failure warranty		About 10 years
Isolation		Input - Output - Power
Dielectric strength		Input - Output - Power - Ground 2000VAC for a minute
Insulation Resistance		Greater than $100M\Omega$ with DC 500V
Operating Temperature / Humidity		-20~60 $^{\circ}C$ / 90%
Storage Temperature / Humidity		-20~80 $^{\circ}C$ / 95%
Weight		400g
Dimensions		W96×H48×92(mm)
Case Material		ABS Resin(Black)
Mounting		Panel mounting Type

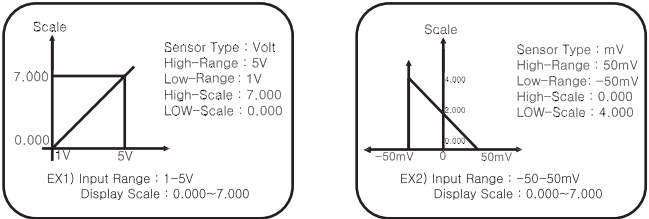
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MODEL & SUFFIX CODE SELECTION



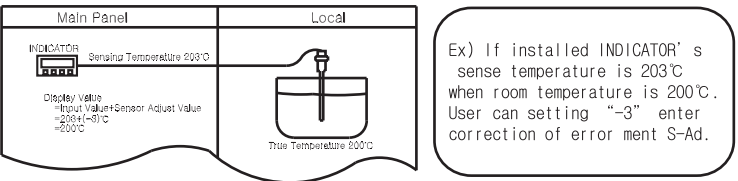
1. Display Scaling function(mA,mV,V)

This function apply to only mA, mV, V input.
User can select input range and display scale freely.



2. Sensor compensation function

User can adjust of error values within field & panel sensor cause difference of installation conditions and field conditions. If some difference occur, it compensate difference by add or deduct the error value, so it reduce measuring difference.



3. Limit function

This function is output limit setting. User can setting OFF("off"), HIGH("L-H"), LOW("L-L"), DUAL("L-d").

- 3.1 OFF("off") : Don't use limit function
- 3.2 HIGH("L-H") : Use High Limit function. When input higher than High Scale value, Limit function is setting and follow output value with display "LmH".
- 3.2 LOW("L-L") : Use Low Limit function. When input lower than Low Scale value, Limit function is setting and follow output value with display "LmL".
- 3.4 DUAL("L-d") : Use High, Low Limit function. When input higher than High Scale value, Limit function is setting and display "LmH". When input lower than Low Scale value, display "LmL" and follow output value.
- ※ "oFF", "L-H", "L-L", "L-d" is displayed letter

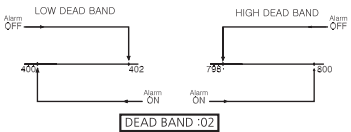
4. Burn out function

When disconnection and Range Over / Under, output value is Burn Out function setting value. User can setting OFF("off"), HIGH("b-H"), LOW("b-L").

- 4.1 HIGH("b-H") : If disconnection or Range Over / Under, display "bH" and outputs the higher limit of 105%. (about 20.8mA)
- 4.2 LOW("b-L") : If disconnection or Range Over / Under, display "bL" and output the lower limit of -5%. (about 3.2mA)

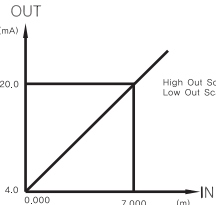
5. Alarm function

Product : SMU-3200
Low Alarm Value : 400.0
High Alarm Value : 800.0
Dead Band : 2.0



User can setting the wanted alarm values. As measuring values come up to alarm values that within a alarm setting values, the alarm output will be over respond. So alarm dead band function mode reduce the hypersensitive respond at the alarm relay output.

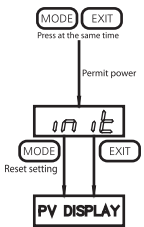
6. Output scale function



If output function in option, output value is change as display range. Also can change to against scale.

7. Reset setting function

This function is recover all values that are set to the initial state. Press MODE key and EXIT key as the same time. Than permit power to product. After company name and version indicate, reset setting function progression as follow :



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Setup method

