디지탈 지시 경보계(백색 LED)

WHITE COLOR DIGITAL INDICATORS WITH ALARM

FEATURES

- Multi-range input (T/C, RTD, Volt, mA, etc)
- 4step LED brightness control
- High accuracy 16bit A/D converter
- Peak hold function (Highest & Lowest)
- Cut off function (low value limit function)
- RS-485 Communication interface
- 4 points alarm & Dead band set
- Isolation current two output (4.0~20.0mA) & Output scaling
- Sensor power source DC 24V in STD specification

SPECIFICATIONS

▶ **Measuring and display cycle :**
200ms(mV, Volt, mA type)
400ms(TC, RTD type)

▶ **Input resistance :** Volt-400kΩ
Others type-1kΩ

▶ **Signal source resistance :** Pt 100Ω type-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**

▶ **Built-in Sensor power source** : DC 24V 30mA ±0.5%

▶ **Accuracy** : Display ±0.2% FS

▶ **Isolation current output(Option)**

Current	: DC 4.00~20.00mA
Maximum load resistance	: 600Ω
Isolation resistance(Input-Output)	: 100MΩ or more (DC 500V)

▶ **Alarm(Option)**

Contact output type	: Normal open (Normal close-Order made)
Max switching power	: 60W 125VA
Max switching voltage	: DC 220V, AC 250V
Max switching current	: DC 2A, AC
Max Carrying current	: DC 3A, AC

▶ **Ambient temperature & Humidity**
Operation : -10~50℃, 10~90%
Storage : -20~70℃, 5~95%

▶ **Power supply**

Voltage	: AC 85~265V(45~65Hz) DC 24V(Option)
Power consumption	: Max 4VA
Isolation resistance	: 100MΩ, DC 500V (FG-Input, FG-Power, Power-Input, Input-Output)

▶ **Communication interface(Option)**

Type	: RS-485 & modebus.RTU
Speed	: 4800, 9600, 19200bps
ID(address) setting	: 0~99

▶ **Etc**

Weight	: 500g
Mounting	: Panel mount
Dimension	: 96(W) X 48(H) X 112(D)mm

INPUT TYPE

Sensor Type		Range	Scale	Simbol
TC	B(PR)	0~1800℃	-	tC-b
	R(PR)	0~1750℃	-	tC-r
	S(PR)	0~1750℃	-	tC-S
	K(CA)	-200~1350℃	-	tC-K
	E(CRC)	-199.9~700.0℃	-	tC-E
	J(IC)	-199.9~800.0℃	-	tC-J
	T(CC)	-199.9~400.0℃	-	tC-t
Volt	mV	-50.0~50.0mV	-1999~9999	mu
	Volt	-1.000~1.000V	-1999~9999	Iu
	Volt	-10.0~10.0V	-1999~9999	10u
mA	mA	4.00~20.00mA	-1999~9999	mA
PT	Pt100Ω	-199.9~800.0℃	-	d-Pt
	JPt100Ω	-199.9~500.0℃	-	J-Pt

* mA type : External 250Ω(±0.1% 25ppm) resistance is attached

PART NAME

① Measured value display : white color
② Alarm condition display
③ "mode" Key : Storage the set data and change the operation menu
④ ▶ Key : Enter into the data setting mode and modify the changed location
⑤ ▲ Key : Change the data value
⑥ "EXIT" Key : Out of mode
⑦ Unit

MAJOR FUNCTIONS

▶ FND Bright set function

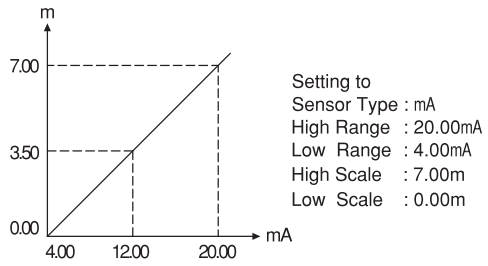
Mode 1 - FND bright 100%
Mode 2 - FND bright 75%
Mode 3 - FND bright 25%
Mode 4 - FND off

* This mode is display measure value after 10second disappear measure value.
Push the any key expression measure value.

▶ Display scaling function(mV, Volt, mA only)

This function changes and sets the display value according to scale and input range.

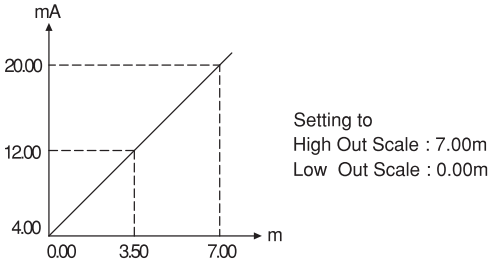
Ex) In case of input range 4.00~20.00mA and Level 0.00~7.00m



▶ 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



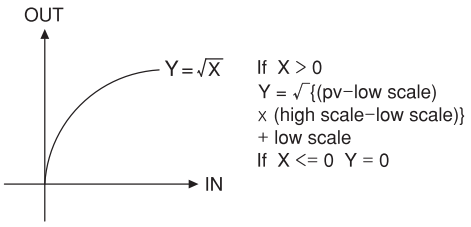
▶ Function(mV, Volt, mA type)

[L in]

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

[root]

Pass the input after √. Used for flow rate by orifice.



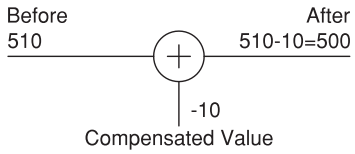
[C-oF]

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

▶ 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℃



▶ Alarm function

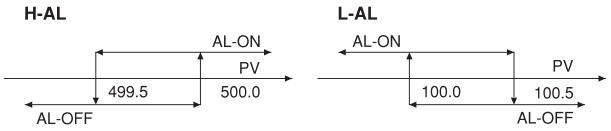
Alarm type : High, Low

The alarm consists of 4 relays, and it can output relay contact output individually.

Ex) AL-1 : High alarm value 500.0,
AL-2 : Low alarm value 100.0,
Alarm dead band setting 0.5

The high alarm(AL-1) is ON when the present value(PV) is 500.0 or more, and OFF when 499.5 or less.

The low alarm(AL-2) is OFF when the present value(PV) is 100.5 or more, and ON when 100.0 or less.



▶ Peak hold function

Peak mode 0 High peak mode

Remember the highest input value and display the highest value when pressing the key.

Peak mode 1 Low peak mode

Remember the lowest input value and display the lowest value when pressing the key.

Peak mode 2 High peak & Display mode

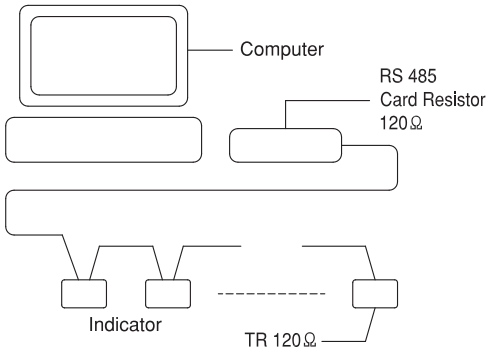
Remember the highest input value, display the highest value in ordinary times, and output the highest transmit output.

Peak mode 3 Low peak & Display mode

Remember the lowest input value, display the lowest value in ordinary times, and output the lowest transmit output.

▶ Communication interface

It is possible to communicate with computer and to monitor remote by using RS-485 and modbus communication interface.

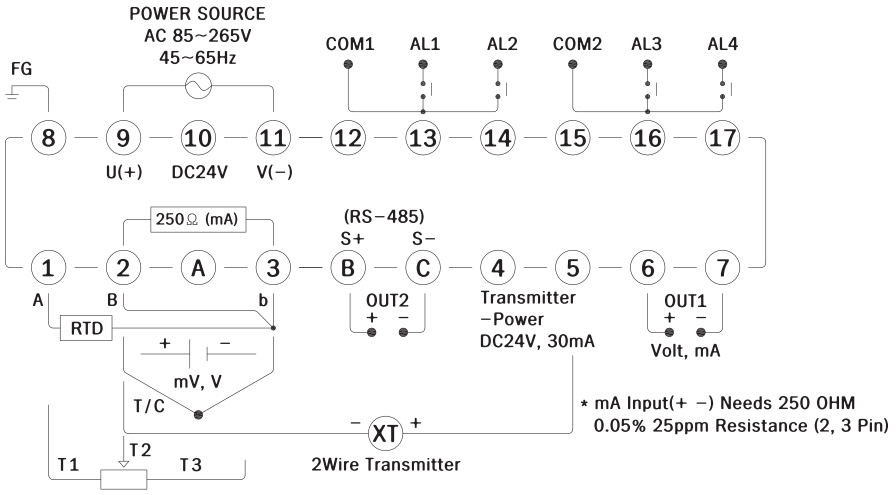


ORDERING CODE

IC 3				W		Description
Type	1					Indicator
	2					Indicator with 2Alarm
	3					Indicator with 4Alarm
Analog output		0				None
		1				Isolation current 1output
		2				Isolation current 2output
Power			0			AC 85~265V (45~65Hz)
			1			DC 24V
			2			Etc
Interface					0	None
					1	RS-485
					2	Modbus RTU(485)

In case of 2AO dual output does not became interface communication.

TERMINAL DIAGRAM



DIMENSION & PANEL CUT