

FEATURES

- Multi-range input (T/C, RTD, Volt, mA, Etc)
- High accuracy 16bit A/D converter
- Peak hold function (Highest & Lowest)
- Burnout function
- RS-485 Communication interface
- 2, 4 points alarm & Dead band set
- Isolation current output (DC 4.00~20.00mA) & Output scaling
- Sensor power source DC 24V in STD specification
- Exit IN/OUT hold

SPECIFICATIONS

- ▶ Measuring and display cycle : 200ms(mV, Volt, mA type)
400ms(TC, RTD type)
- ▶ Input resistance : Volt-400k Ω
Others type-1M Ω
- ▶ Signal source resistance : Pt 100 Ω type-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
- ▶ Built-in Sensor power source : DC 24V 30mA $\pm$ 0.5%
- ▶ Accuracy : $\pm$ 0.2% FS
- ▶ Isolation current output
(2 output is isolation between output)
Current : DC 4.00~20.00mA
Maximum load resistance : 600 Ω
Isolation resistance(Input-Output) : 100M Ω or more
(DC 500V)
- ▶ Isolation voltage output(Optional)
Voltage : DC 0~10V
Minimum load resistance : 1k Ω or more
Isolation resistance(Input-Output) : 100M Ω or more
(DC 500V)

▶ Alarm output(Alarm setter)

- Contact output type : Normal open
- 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°C, 10~90%
- Storage : -20~70°C, 5~95%

▶ Power supply

- Voltage : AC 110/220V(50~60Hz)
DC 24V(Optional)
- Power consumption : Max 4VA
- Isolation resistance : 100M Ω , DC 500V
(FG-Input, FG-Power, Power-Input, Input-Output)

▶ Communication interface(Optional)

- Type : RS-485
- Speed : 4800, 9600, 19200bps
- ID(address) setting : 0~15

▶ Etc

- Weight : 500g
- Mounting : Din rail & wall mounted
- Dimension : 50(W) X 80(H) X 102(D)mm



A

B

C

D

E

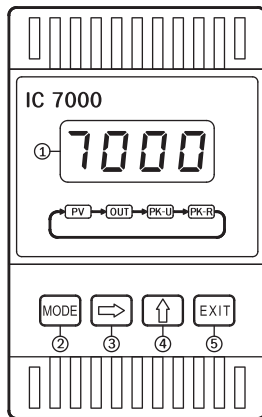
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G

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ISOLATED CONVERTERS WITH ALARM

PART NAME



- ① Measured value display
- ② MODE Key :
Storage the set data and change the operation menu
- ③ Key :
Enter into the data setting mode and modify the changed location
- ④ Key :
Change the data value
- ⑤ EXIT Key : Out of mode

INPUT TYPE

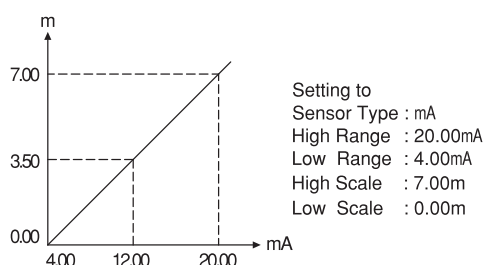
Sensor Type	Range	Scale	Simbol
TC	R(PR 13%)	0~1750℃	-
	K(CA)	-200~1350℃	-
	E(CRC)	-199.9~700.0℃	-
	J(IC)	-199.9~800.0℃	-
	T(CC)	-199.9~400.0℃	-
Volt	mV	-100.0~100.0mV	-1999~9999
	Volt	-10.0~10.0V	-1999~9999
mA	mA	4.00~20.00mA	-1999~9999
PT	Pt100Ω	-199.9~800.0℃	-
	JPt100Ω	-199.9~500.0℃	-

MAJOR FUNCTIONS

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

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

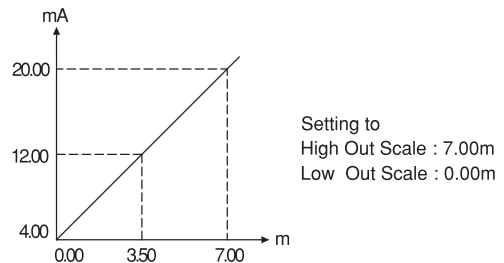
Ex) In case of input range 4.00~20.00mA and Level 0.00~7.00m



► 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)

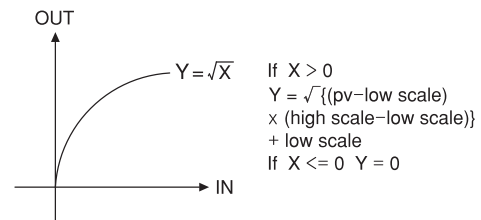
L **in**

Pass the input as it is.

Used for general input type and linearity input.

r o o t

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



L **in** **t**

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

► Alarm function

Alarm type : High, Low

The alarm consists of 2 relays, and it can output relay contact output individually

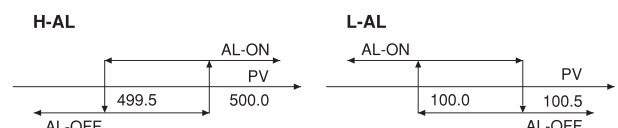
Ex) AL-1 : High alarm value 500.0,

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.



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ISOLATED CONVERTERS WITH ALARM

Sensor compensation function

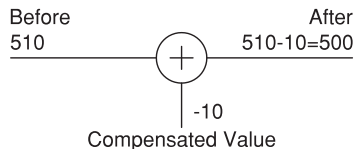
The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 510℃

After sensor adjust

= measured value + compensated value

= 510 - 10 = 500℃



Peak mode 2 High peak & Display mode

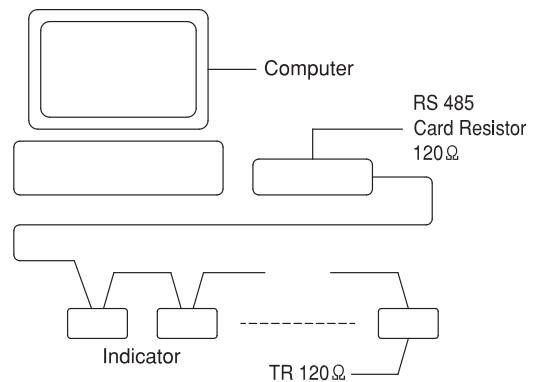
Remember the highest input value, display the highest value in ordinary times, and output the highest transmit output.

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 communication interface.



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.

ORDERING CODE

IC 71			Description
Analog output	0		Isolation current Single output (DC 4.00~20.00mA)
	1		Isolation current Double output (DC 4.00~20.00mA)
	2		Isolation voltage Single output (0~10V)
	3		Isolation voltage Double output (0~10V)
	4		Exit IN/OUT Hold
	5		RS-485(422)
	6		Isolation current Three output (DC 4.00~20.00mA)
	7		Etc
Power		0	AC 85~265V(45~65Hz)
		1	DC 24V

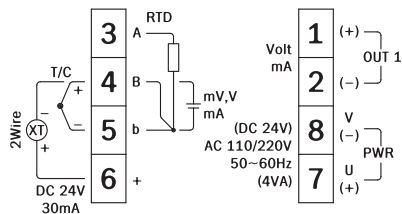
IC 72			Description
Analog output	0		Isolation current 1 output (DC 4.00~20.00mA) + Alarm 1 output
	1		Isolation voltage single output (0~10V) + Alarm 1 output
	2		Etc(Consult to the factory)
	3		alarm relay contact - 2AL
	4		alarm relay contact - 4AL
Power		0	AC 110/220V
		1	DC 24V

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ISOLATED CONVERTERS WITH ALARM

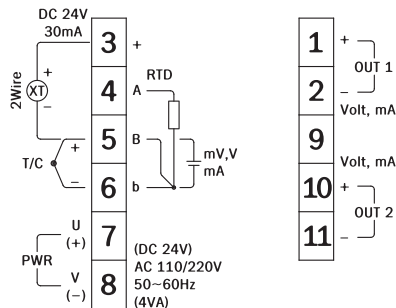
TERMINAL DIAGRAM

* 1 Output

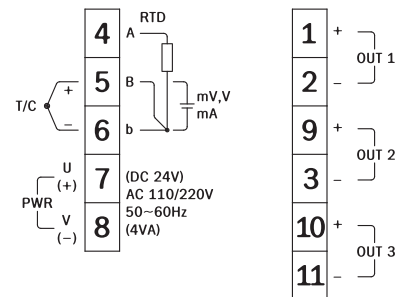


- * mA Input(+ -) Needs 250 OHM 0.05% 25ppm Resistance
- * Peak/Hold function needs dry contact input on pin 3 and 6

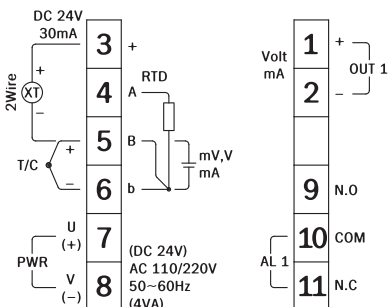
* 2 Output



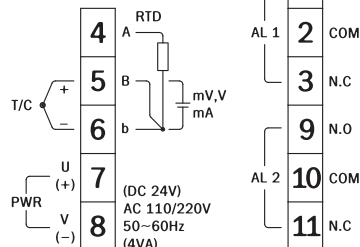
* 3 Output(mA only)



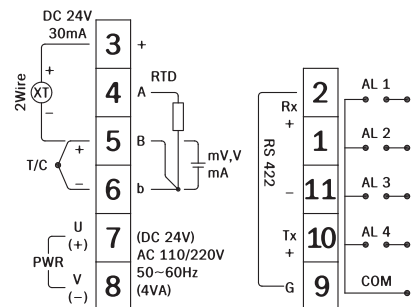
* mA(Volt) + 1 Alarm



* 2 Alarm(only)



* 4 Alarm & 1mA(Volt) + RS 485(422)



DIMENSIONS & PANEL CUT

