

## FEATURES

- RGO Color display setting
- Multi-range input (T/C, RTD, Volt, mA, etc)
- High accuracy 16bit A/D converter
- Peak hold function (Highest & Lowest)
- RS-485 communication interface
- 4-points alarm & Dead band set
- Isolation current output(4~20mAADC) & Output scaling
- Two unit function It can automatically convert the mmHg and kg/cm<sup>2</sup> when measuring the pressure and vacuum.
- Sensor power source DC24V STD specification

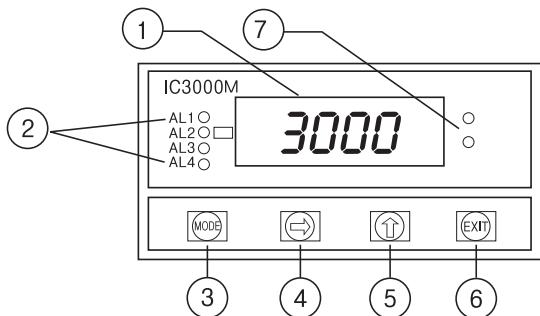


Color setting  
0:RED  
1:GREEN  
2:ORANGE

## SPECIFICATIONS

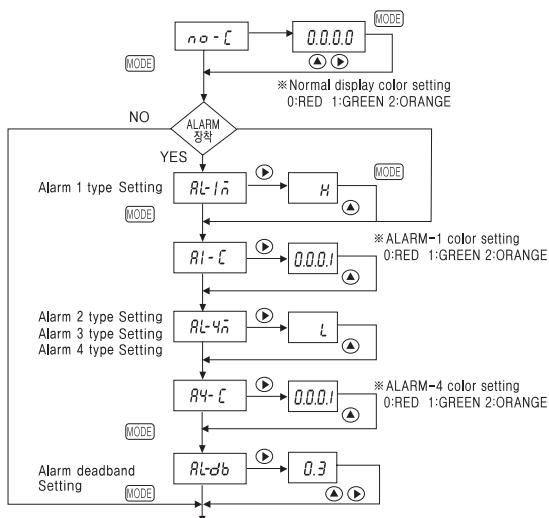
• Display color	: Red, Green, Orange	• Ambient temperature & Humidity	
• Measuring and display cycle	: 200ms(mV, Volt, mA type) 400ms(TC, RTD type)	Operation	: -10°C~60°C, 10%~90%
• Input resistance	: Volt - 400kΩ Others type-1kΩ	Storage	: -20°C~70°C, 5%~95%
• Signal source resistance	: Pt100Ω type - 30Ω/line Others type-300Ω/line	• Power supply	
• CMRR (Common Mode Rejection Ratio)	: 140dB or more	Voltage: AC110/220V (50/60Hz)	
• NMRR (Normal Mode Rejection Ratio)	: 60dB or more	DC24V (Option)	
• Moving average filter		Power consumption	: 4VA Max
• Built-in Sensor power source	: DC24V 30mA±0.5%	Isolation resistance	: 100MΩ 500VDC (FG-Input, FG-Power, Power-Input, Input-Output)
• Accuracy	: ±0.2%FS	• Communication interface (Option)	
• Isolation current output (Option)		Type	: RS-485, 422
Current	: 4~20mA	Speed	: 4800, 9600, 19200bps
Maximum load resistance	: 600Ω	ID(address) setting	: 0~15
Isolation resistance (Input-Output)	: 100kΩ or more (500VDC)	• Etc	
• Alarm (Option)		Weight	: 500g
Contact output type	: Normal open (Normal close - Order made)	Mounting	: Panel mount
Max switching power	: 60W 125VA	Dimension	: 96(W) × 48(H) × 112(D)mm
Max switching voltage	: 220VDC, 250VAC		
Max switching Current	: 2A DC, AC		
Max Carrying current	: 3A DC, AC		

## PARTS NAME



- ① Measured value display: RGO 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 Automatically convert the mmHg & kg/cm<sup>2</sup>

## RGO display Color setting



## INPUT TYPE

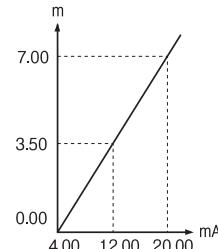
Type	Range	Scale	Symbol
TC	R(PR13%)	0~1750°C	-
	K(CA)	-200~1350°C	-
	E(CRC)	-200.0~700.0°C	-
	J(IC)	-200.0~800.0°C	-
	T(CC)	-200.0~400.0°C	-
Volt	mV	-100~100mV	mv
	Volt	-10~10V	v
mA	mA	4~20mA	mA
	PT	Pt100Ω	-200.0~800.0°C
	JPT100Ω	-200.0~500.0°C	-

## MAJOR FUNCTION

- 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 4.0~20.0mA and Level 0.000~7.000m



Setting to  
Sensor type : mA  
High Range : 20.00mA  
Low Range : 4.00mA  
High Scale : 7.000  
Low Scale : 0.000

- Function (mV, Volt, mA type only)

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

**Root** Pass the input after  $\sqrt{\phantom{x}}$ . Used for flow rate by orifice.

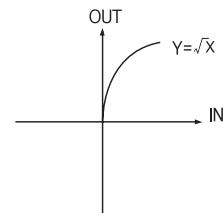
if  $x > 0$

$$Y = \sqrt{\{(pv-\text{low scale})\}}$$

X(high scale-low scale)}

+low scale

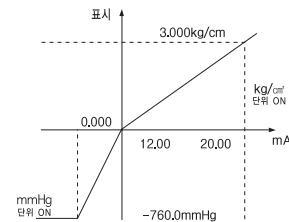
if  $x \leq 0$   $Y=0$



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

**uAC** This is the function when measuring from vacuum to pressure (-760mmHg ~ 3.0kg/cm<sup>2</sup>) by pressure transmitter, it converts unit and PV to mmHg under Zero value and to scaled kg/cm<sup>2</sup> setting to scale high above zero value. It is possible to trim the zero point in the atmosphere pressure by key used for sensor compensation.

Ex) To see from vacuum to pressure in transmitters specification range -760~3.000 kg/cm<sup>2</sup> and output 4~20mA



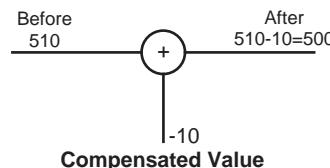
Sensor type : mA  
High Range : 3.0  
Low Scale : 0.0  
Function : VAC

- 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  
 $= 510 - 10 = 500$

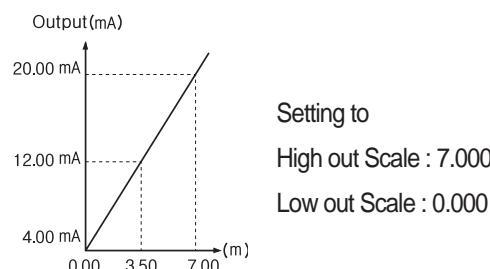


- Output scaling function

This function can change the 4-20mA value as the output scale.

Ex) In case of display value 0.000~7.000m, Output 4~20mA

setting to High out scale : 7.000 Low out scale : 0.000



- 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 low 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

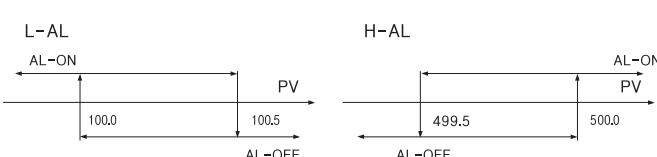
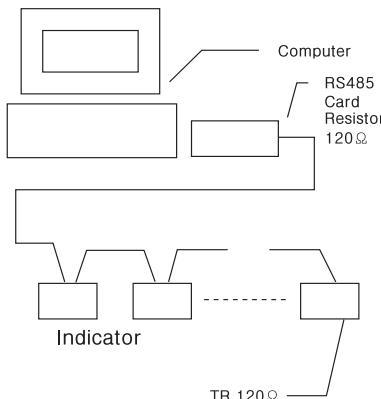
Remember the highest input value, display the highest value in ordinary times, and output the highest transmit output.

**Peak mode 3:** Low peak & Display mode

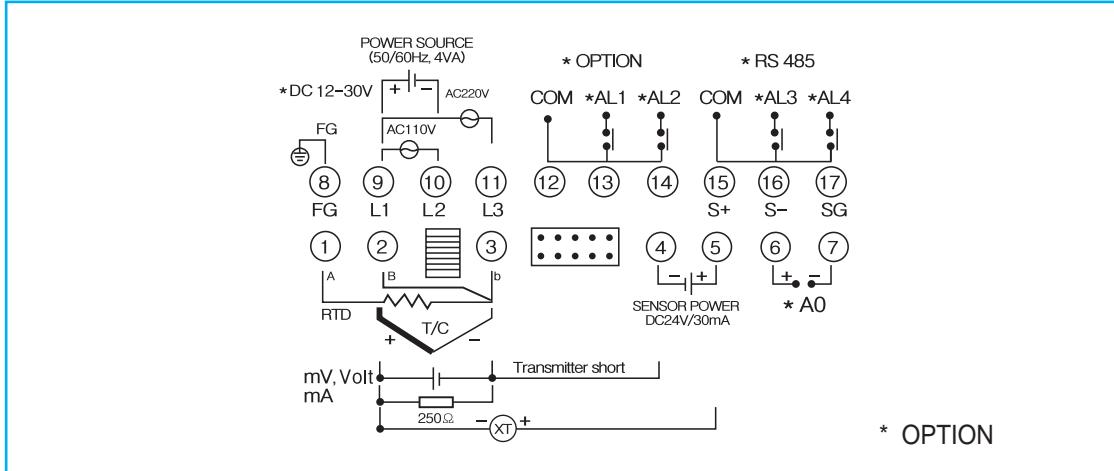
Remember the lowest input value, display the lowest value in ordinary times, and output the lowest transmit output.

- Communication interface

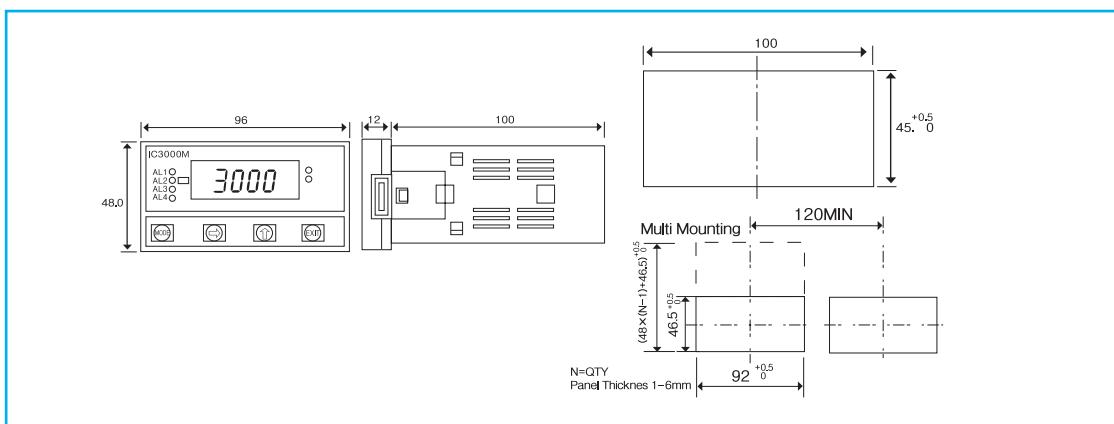
It is possible to communicate with computer and to monitor remote by using RS-485 communication



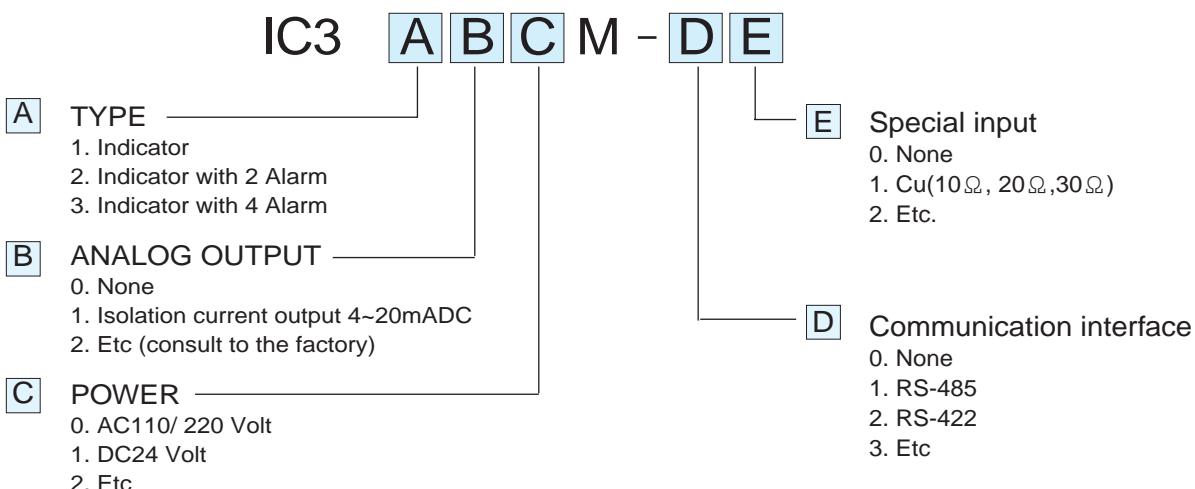
## TERMINAL DIAGRAM



## DIMENSION &amp; PANEL CUT



## ORDERING CODE

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