

# Autonics

## Isolated Converter CN-6000 SERIES

### MANUAL



Thank you very much for selecting Autonics products.  
For your safety, please read the following before using.

#### Caution for your safety

- ※Please keep these instructions and review them before using this unit.
- ※Please observe the cautions that follow;
- Warning** Serious injury may result if instructions are not followed.
- Caution** Product may be damaged, or injury may result if instructions are not followed.
- ※The following is an explanation of the symbols used in the operation manual.
- Caution:** Injury or danger may occur under special conditions.

#### Warning

- In case of using this unit with machinery(Ex: nuclear power control, medical equipment, ship, vehicle, train, airplane, combustion apparatus, safety device, crime/disaster prevention equipment, etc) which may cause damages to human life or property, it is required to install fail-safe device.**  
It may cause a fire, human injury or damage to property.
- Install this unit on a panel.**  
It may cause electric shock.
- Do not connect, repair, or inspect this unit when power is ON.**  
It may cause electric shock.
- Do not disassemble the case. Please contact us if it is required.**  
It may cause electric shock or a fire.
- Wire properly after checking terminal numbers.**  
It may cause a fire.

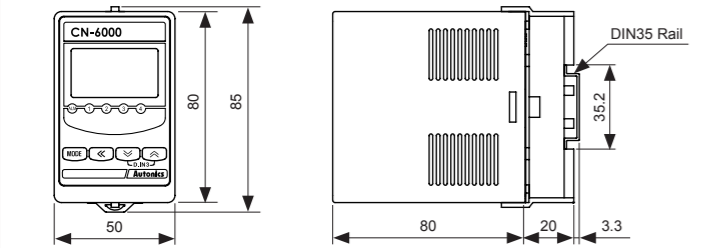
#### Caution

- This unit shall not be used outdoors.**  
It might shorten the life cycle of the product or cause electric shock.
- Please observe the rated specifications.**  
It might shorten the life cycle of the product or cause a fire.
- In cleaning this unit, do not use water or organic solvent. And use dry cloth.**  
It may cause electric shock or a fire.
- Do not use this unit where there are flammable or explosive gas, humidity, direct ray of the sun, radiant heat, vibration and impact etc.**  
It may cause a fire or explosion.
- Do not inflow dust or wire dregs into the unit.**  
It may cause a fire or malfunction.
- Wire it properly after checking terminal numbers when connecting power cable and measuring input.**  
It may cause a fire or explosion.

#### Ordering information

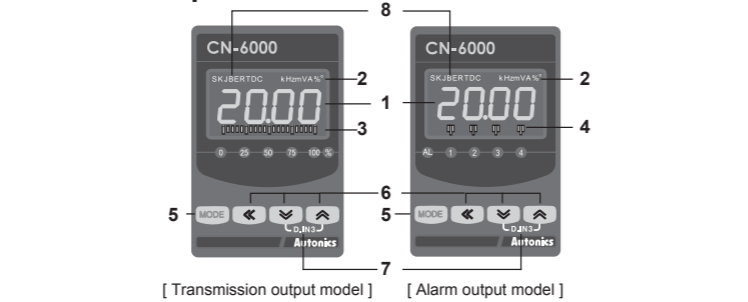
CN-6100-C1	C1	Transmission output (0-20 mA) 1EA
CN-6100-C2	C2	Transmission output (0-20mA) 2EA
CN-6100-V1	V1	Transmission output (0-10 V) 1EA
CN-6100-V2	V2	Transmission output (0-10 V) 2EA
CN-6100-R1	R1	Alarm output 1EA
CN-6100-R2	R2	Alarm output 2EA
CN-6100-R4	R4	Alarm output 4EA
CN-6100-0	0	100-240 VAC 50 to 60 Hz
CN-6100-1	1	24 VDC
CN-6100-10	10	Universal input
CN-6100-40	40	Pulse input (※option)
CN-6100-CN-6	CN-6	Isolated Converter

#### Dimensions



※ The above specifications are subject to change without notice.

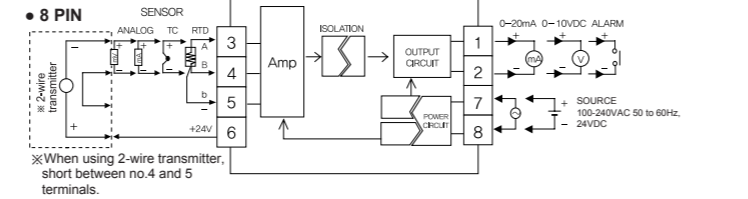
#### Part descriptions



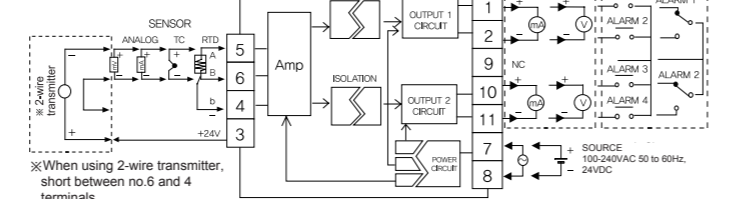
- Display part (selectable red, green, yellow)
  - Run mode: Displays current measured value.
  - Parameter set mode: Displays parameters and SV.
- Unit display part (red)
- Output scale Bar : For transmission output mode, displays output as % by scale bars.
- Alarm output indicator: Turns ON when the alarm output is on.
- MODE** key : Used to enter parameter set mode, move to parameters, save SV and return to RUN mode.
- ☒, ☑, ☓** key: Used to change parameter SV.
- D.IN3** : Press the ☒ and ☑ keys for 3 sec. at the same time, it operates the set function (alarm clear, display hold, zero-point adjustment) at [dI - K].
- Input type (only for CN-610□-□)** : Turns ON the selected temperature sensor type at [I N - P] parameter. (In case of thermocouple type, L, N, U, P types are not displayed. In case of RTD type, RTD is displayed.) (In case of thermocouple type, L, N, U, P types are not displayed. In case of RTD type, RTD is displayed.)

#### Connections

##### ■ CN-610□-□

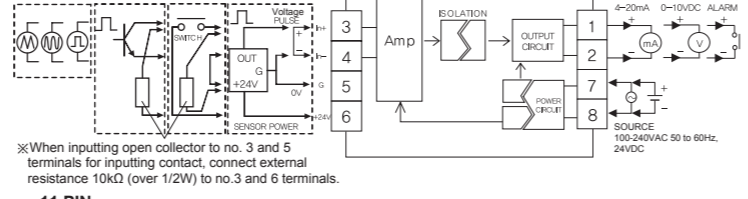


##### ● 11 PIN

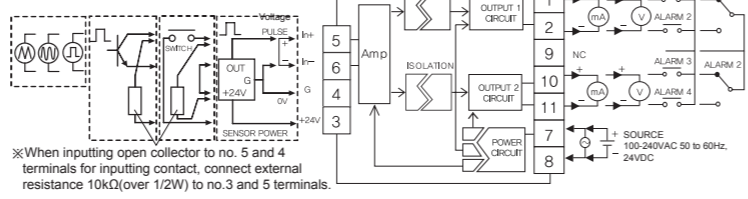


##### ■ CN-640□-□

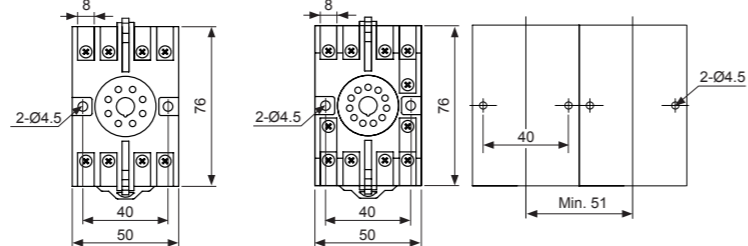
##### ● 8 PIN



##### ● 11 PIN



##### ● 8 PIN socket



#### Specification

Model	CN-610□-□	CN-640□-□
Power supply	AC voltage 100-240 VAC 50 to 60 Hz	DC voltage 24 VDC
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	AC voltage Max. 8 VA	DC voltage Max. 3 W
Display method	4digit : 12 Segment LCD Display (selectable red, green, yellow) Graphic bar and Input/Unit display part (red)	
Character size	Display part : 6.4×11.0 mm (12 Segment), Input/Unit display part : 1.4×2.75 mm (unit)	
Input type	RTD	JPT100Ω, DP100Ω, DP50Ω, Cu50Ω, Cu100Ω
	TC	K, J, E, T, R, B, S, N, C, L, U, PLII
	Analog	• Voltage : -50.0-50.0 mV, -199.9-200.0 mV, -1.000-1.000 V, -1.00-10.00 V • Current : 0.00-20.00 mA, 4.00-20.00 mA
Output	Transmission output	0-20 mA(adjustable output range), load resistance max. 600 Ω (accuracy: ±0.3 F.S., resolutions: 8000)
	Alarm output	1-point : Relay contact capacity 250 VAC 5 A 1 a, 2-point : Relay contact capacity 250 VAC 3 A 1 c, 4-point : Relay contact capacity 250 VAC 5 A 1 a
Display accuracy	±0.2%F.S. ±1digit (25±5 °C), ±0.3%F.S. ±1digit (-10 to 20 °C, 30 to 50 °C) ※CN-610□-□: For TC, the input below -100 °C is [±0.4%F.S.] ±1digit (TC-T, TC-U is max. ±2.0 °C)	
Setting method	Set by front keys	
Sampling cycle	Analog input : 100 ms, Temperature sensor input : 250 ms	
Display cycle	Same with pulse input cycle When pulse input cycle is over 10 sec., it is updated by every 10 sec.	
Dielectric voltage	2000 VAC 50/60 Hz for 1 min. (between input terminal and power terminal)	
Vibration	0.75 mm amplitude at frequency of 5 to 55 Hz (for 1 min.) in each of X, Y, Z directions for 2 hours	
Insulation resistance	Min. 100 MΩ (at 500VDC megger)	
Noise resistance	Square shaped noise by noise simulator (pulse width 1 μs) ±2 kV	
Memory retention	Approx. 10 years (non-volatile semiconductor memory type)	
Environment	Ambient temperature	-10 to 50 °C, storage : -20 to 60 °C
	Ambient humidity	35 to 85%RH, storage : 35 to 85%RH
Approval	CE	
Unit weight	Approx. 160 g	Approx. 200 g

#### Factory default

##### ■ CN-610□-□ (universal input)

###### ◎ Monitoring mode

Parameter	Default	Parameter	Default	Parameter	Default	Parameter	Default
oUt 1	----	AL 1	1000	AL 3	1000	HPEK	----
oUt 2	----	AL 2	0000	AL 4	0000	LPEK	----

###### ◎ Program mode

Parameter	Default	Parameter	Default	Parameter	Default	Parameter	Default
I N - P	ARM2	L o R 1	0400	oU 1	0000	E x i o	S P
U N I T	o C	H o R 1	2000	oU 2	1000	A L - 1	A t I A
d U N E	o / o	L o R 2	0400	AL - 2	A t I A	M A V F	o 1
L - R G	0400	H o R 2	2000	AL - 3	A t I A	d I - K	H o L d
H - R G	2000	b A R	oU 1	AL - 4	A t I A	C o L R	G R N
d P	o 0	L o U 1	0000	A - H Y	o 0 1	b U R N	o N
L - S C	0000	H o U 1	1000	I N S F	L I N	U S E R	S t N d
H - S C	1000	L o U 2	0000	O P S I	o 8 0 0	L o C K	o F F
I N - b	o 0 0	H o U 2	1000				

- ※ 1. Displayed only for current transmission output, alarm output model (CN-610□-C1/C2/R1/R2/R4).
- ※ 2. Displayed only for voltage transmission output model (CN-61□-V1/V2).

##### ■ CN-640□-□ (pulse input)

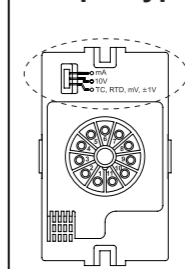
###### ◎ Monitoring mode

Parameter	Default	Parameter	Default	Parameter	Default	Parameter	Default
oUt 1	----	AL 1	0000	AL 3	1000	HPEK	----
oUt 2	----	AL 2	0000	AL 4	1000	LPEK	----

###### ◎ Program mode

Parameter	Default	Parameter	Default	Parameter	Default	Parameter	Default
I N - P	50KH	L o R 1	0000	H o U 2	5000	M A V F	o 4
d U N E	K H Z	H o R 1	1000	E x i o	S P	d I - K	H o L d
L - R G	0000	L o R 2	0000	AL - 1	A t I A	C o L R	G R N
H - R G	5000	H o R 2	1000	AL - 2	A t I A	U S E R	S t N d
d P	o 0 0	b A R	oU 1	AL - 3	A t I A	L o C K	o F F
L - S C	0000	L o U 1	0000	AL - 4	A t I A		
H - S C	5000	H o U 1	5000	A - H Y	o 0 1		
I N - b	o 0 0	L o U 2	0000	S P A N	1000		

#### Input type selection switch



- mA : Select it for 0(4)-20 mA input
- 10 V : Select it for -1 V-10 V input
- TC, RTD, mV, ±1V : Select it for RTD, TC temperature sensor or ±1 V, mV input
- ※ The pulse input model (CN-640□-□) does not have this input type selection switch.
- ※ 8 pin and 11 pin models have same position of the switch.
- This product is multi-input. Select the desired input type by the input type selection switch and select the input type at [I N - P].
- The selection of the input type selection switch and that of [I N - P] should be same to display correct value.
- Factory default is 4-20 mA.

#### Input type and range

##### ■ CN-610□-□ (universal input)

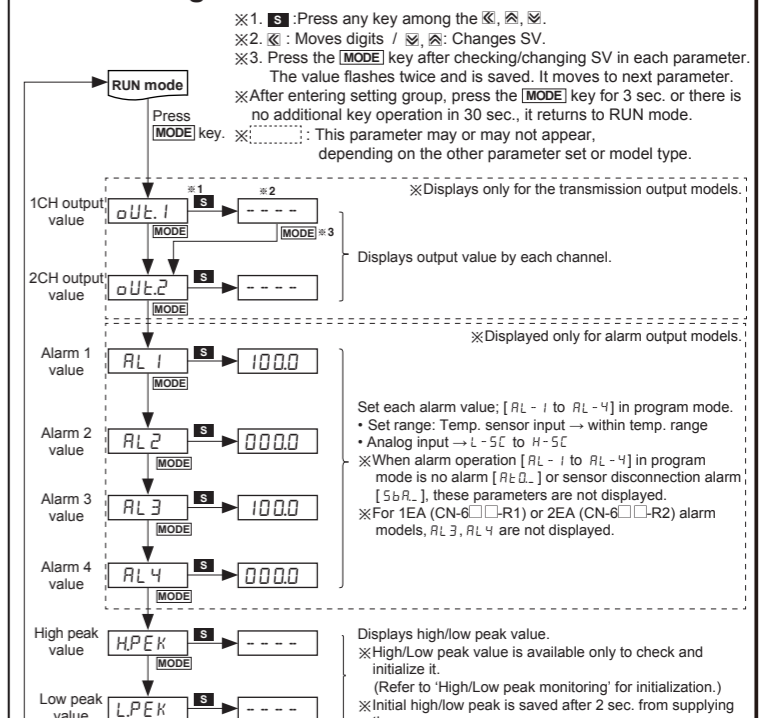
Input type	Parameter	Input range (°C)	Input range (°F)	
Thermo-couple	K(CA)	ε C K 1	-200 to 1350 -328 to 2462	
	J(IC)	ε C K 2	-199.9 to 999.9 -328 to 1832	
	E(CR)	ε C - J	-199.9 to 800.0 -328 to 1472	
	T(CC)	ε C - E	-199.9 to 800.0 -328 to 1472	
	B(PR)	ε C - t	-199.9 to 400.0 -199.9 to 752.0	
	R(PR)	ε C - b	400 to 1800 752 to 3272	
	S(PR)	ε C - R	0 to 1750 32 to 3182	
	N(NN)	ε C - 5	0 to 1750 32 to 3182	
	C(W5)	ε C - N	-200 to 1300 -328 to 2372	
	L(IC)	ε C - C	0 to 2300 32 to 4172	
	U(CC)	ε C - L	-199.9 to 900.0 -328 to 1652	
	Platinel II	ε C - U	-199.9 to 400.0 -199.9 to 752.0	
RTD	Cu50Ω	ε C - P	0 to 1390 32 to 2534	
	Cu100Ω	ε C - 5	0 to 1750 32 to 3182	
	JPT100Ω	ε C - N	-200 to 1300 -328 to 2372	
	DP150Ω	ε C - C	0 to 2300 32 to 4172	
	DP100Ω	ε C - L	-199.9 to 900.0 -328 to 1652	
		ε C - U	-199.9 to 400.0 -199.9 to 752.0	
Analog	Current	0.00 - 20.00mA 4.00 - 20.00mA	ARM 1 ARM 2	
	Voltage	-50.0 - 50.0mV	ARM 1	-1999 to 9999 (Display range is variable according to decimal point position.)
		-199.9 - 200.0mV	ARM 2	
		-1.000 - 1.000V	ARM 1	
		-1.00 - 10.00V	ARM 2	

##### ■ CN-640□-□ (pulse input)

Input type	Measuring cycle	Parameter	Range
Pulse	0 to 9.999 Hz	Max. 10 sec.	10H
	0 to 99.99 Hz	Max. 10 sec.	100H
	0 to 999.9 Hz	Max. 10 sec.	1KH
	0 to 9.999 kHz	Max. 1 sec.	10KH
0 to 50.00 kHz	Max. 0.1 sec.	50KH	

- ※ Pulse input: Non-contact 0 to 50 kHz, Contact 0 to 45 Hz (displays 0 for below 0.1Hz)
- ※ Input Low Level : 0-1 VDC / Input High Level : 5-24 VDC
- ※ Duty Ratio : 30 to 70%
- ※ The principle of displaying frequency is converting the time difference between input pulses to the frequency. 1 sec. is required to measure 1 Hz, and 10 sec. is required to measure 0.1 Hz. Therefore, it is normal that the lower pulse, the slower response speed. In case of 0 Hz, if there are no pulses for over 2 sec., it is programmed to display 0 Hz to prevent slow response speed.

#### Monitoring mode



## Program mode

※These parameters are based on CN-610□□□ (universal input).  
 For parameter factory default of CN-640□□□□ refer to the Factory default.  
 ※1 to 5: These parameters are not displayed at CN-640□□□□ (pulse input).  
 ※6: Press any key among the  $\leftarrow$ ,  $\rightarrow$ ,  $\uparrow$ ,  $\downarrow$ .  
 ※7:  $\leftarrow$ : Moves digits /  $\rightarrow$ : Changes SV.  
 ※8: Press the **MODE** key after checking/changing SV in each parameter.  
 The value flashes twice and is saved. It moves to next parameter.  
 ※9: After entering setting group, press the **MODE** key for 3 sec. or there is no additional key operation in 30 sec., it returns to RUN mode.  
 ※10: This parameter may or may not appear, depending on the other parameter set or model type.

Press **MODE** key for 3 sec.

Input type: **IN-P** (MODE)  $\rightarrow$  **RMA2** (MODE)  $\rightarrow$  8

Temperature unit: **UNI t** (MODE)  $\rightarrow$  **oC** (MODE)  $\rightarrow$  6

Display unit: **dUN t** (MODE)  $\rightarrow$  **o / o** (MODE)  $\rightarrow$  7

Low limit input value: **L-RG** (MODE)  $\rightarrow$  **0400** (MODE)  $\rightarrow$  8

High limit input value: **H-RG** (MODE)  $\rightarrow$  **2000** (MODE)  $\rightarrow$  9

Decimal point: **dP** (MODE)  $\rightarrow$  **0.0** (MODE)  $\rightarrow$  0

Low limit scale value: **L-5C** (MODE)  $\rightarrow$  **0000** (MODE)  $\rightarrow$  1

High limit scale value: **H-5C** (MODE)  $\rightarrow$  **1000** (MODE)  $\rightarrow$  2

Input correction: **IN-b** (MODE)  $\rightarrow$  **000** (MODE)  $\rightarrow$  3

Trans. output 1 low-limit: **LoR1** (MODE)  $\rightarrow$  **0400** (MODE)  $\rightarrow$  4

Trans. output 1 high-limit: **HoR1** (MODE)  $\rightarrow$  **2000** (MODE)  $\rightarrow$  5

Trans. output 2 low-limit: **LoR2** (MODE)  $\rightarrow$  **0400** (MODE)  $\rightarrow$  6

Trans. output 2 high-limit: **HoR2** (MODE)  $\rightarrow$  **2000** (MODE)  $\rightarrow$  7

Bar display CH: **bRR** (MODE)  $\rightarrow$  **oUt1** (MODE)  $\rightarrow$  8

Trans. output 1 low-limit scale: **LoU1** (MODE)  $\rightarrow$  **0000** (MODE)  $\rightarrow$  9

Trans. output 1 high-limit scale: **HoU1** (MODE)  $\rightarrow$  **1000** (MODE)  $\rightarrow$  0

Trans. output 2 low-limit scale: **LoU2** (MODE)  $\rightarrow$  **0000** (MODE)  $\rightarrow$  1

Trans. output 2 high-limit scale: **HoU2** (MODE)  $\rightarrow$  **1000** (MODE)  $\rightarrow$  2

Input and trans. output extension: **E X I o** (MODE)  $\rightarrow$  **5P** (MODE)  $\rightarrow$  3

AL1 mode: **AL-1** (MODE)  $\rightarrow$  **AL t 1A** (MODE)  $\rightarrow$  4

AL2 mode: **AL-2** (MODE)  $\rightarrow$  **AL t 2A** (MODE)  $\rightarrow$  5

AL3 mode: **AL-3** (MODE)  $\rightarrow$  **AL t 1A** (MODE)  $\rightarrow$  6

AL4 mode: **AL-4** (MODE)  $\rightarrow$  **AL t 2A** (MODE)  $\rightarrow$  7

AL output hysteresis: **A-HY** (MODE)  $\rightarrow$  **001** (MODE)  $\rightarrow$  8

Input special function: **INSF** (MODE)  $\rightarrow$  **LIN** (MODE)  $\rightarrow$  9

Atmospheric pressure: **OPSI** (MODE)  $\rightarrow$  **0800** (MODE)  $\rightarrow$  0

Span correction: **SPAN** (MODE)  $\rightarrow$  **1000** (MODE)  $\rightarrow$  1

Normal average digital filter: **AVF** (MODE)  $\rightarrow$  **01** (MODE)  $\rightarrow$  2

Moving average digital filter: **MAVF** (MODE)  $\rightarrow$  **04** (MODE)  $\rightarrow$  3

Digital input key: **di-K** (MODE)  $\rightarrow$  **HoLd** (MODE)  $\rightarrow$  4

Display color: **CoLR** (MODE)  $\rightarrow$  **GRN** (MODE)  $\rightarrow$  5

Sensor disconnection alarm output: **bURN** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  6

User level: **USER** (MODE)  $\rightarrow$  **StNd** (MODE)  $\rightarrow$  7

Lock: **LoCK** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  8

## Functions

### Alarm [AL-1, AL-2, AL-3, AL-4]

This product has 1 alarm or 2 or 4 alarms to operate individually when the value is too high or low.

Alarm function is set by the combination of alarm operation and alarm option.

To clear alarm, use digital input (setting as **AL t 1A** for **di-K**) or turn the power OFF and ON.

※For the model without alarm output (CN-6□□□C1/C2/V1/V2), these parameters are not displayed.

Mode	Name	Alarm operation	Descriptions
AL t 0	—	—	No alarm operation
AL t 1	High limit alarm	OFF $\rightarrow$ ON High limit alarm value: 800°C	PV $\geq$ alarm temperature, alarm is ON
AL t 2	Low limit alarm	ON $\rightarrow$ OFF Low limit alarm value: 200°C	PV $\leq$ alarm temperature, alarm is ON
5bRL	Sensor break alarm	—	It will be ON when it detects sensor disconnection. Sensor break alarm does not have alarm option.

※1. Only for CN-610□□□□. ※H: Alarm output hysteresis

### Alarm operation

Option	Name	Descriptions
AL t 1A	Standard alarm	If it is an alarm condition, alarm output is ON. Unless an alarm condition, alarm output is OFF.
AL t 1b	Alarm latch	If it is an alarm condition, alarm output is ON. Before clearing the alarm, an ON condition is latched. (Holding the alarm output)
AL t 1c	Standby sequence	First alarm condition is ignored. From the second alarm condition, standard alarm operates. When power is ON and it is an alarm condition, it is ignored. From the second alarm condition, standard alarm operates.
AL t 1d	Alarm latch and standby sequence	If it is an alarm condition, it operates both alarm latch and standby sequence. When power is ON and it is an alarm condition, it is ignored. From the second alarm condition, alarm latch operates.

### Alarm output hysteresis [Program mode: A-HY]

Set the interval of ON/OFF alarm output.  
 The set hysteresis is applied to AL1 to AL4 and it is as below.  
 ※Ex) A-HY: 4, high limit alarm value: 800, low limit alarm value: 200

### High/Low peak monitoring [Monitoring mode: HPEK, LPEK]

This function is to save high/low peak to check the invisible abnormal condition of system at [HPEK] or [LPEK] in monitoring mode.  
 When the high/low peak is out of the temperature range, it displays HHHH or LLLL.  
 To initialize high/low peak, press the  $\leftarrow$ ,  $\rightarrow$  keys at the same time for 3 sec. at [HPEK] or [LPEK]. In this case, peak value is the present input value.

### Error

Display	Descriptions	Troubleshooting
LLLL	Flashes when measured sensor input is lower than the temperature range.	When input is moved within the temperature range, it is cleared.
HHHH	Flashes when measured sensor input is higher than the temperature range.	
bURN	Flashes when the sensor is break or not connected.	Check temperature sensor connection.
ERR	Flashes when there is error to SV.	Check set conditions and re-set it.
ERR2	Flashes when [IN-P] setting and input type selection switch setting are not same.	Check input type.

### Parameter initialization

To initialize all parameter as factory default, supply the power to the product with pressing the **MODE** and  $\leftarrow$  keys at the same time and it enters initialization parameter.  
 ※Parameter initialization is available only when lock [LoCK] is set as oFF.

Press **MODE** +  $\leftarrow$  keys at the same time.

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  1

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  2

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  3

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  4

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  5

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  6

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  7

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  8

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  9

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  0

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  1

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  2

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  3

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  4

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  5

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  6

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  7

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  8

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  9

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  0

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  1

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  2

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  3

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  4

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  5

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  6

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  7

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  8

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  9

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  0

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  1

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  2

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  3

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  4

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  5

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  6

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  7

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  8

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  9

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  0

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  1

Display: **INI t** (MODE)  $\rightarrow$  **oFF** (MODE)  $\rightarrow$  2

Display: **INI t** (MODE)  $\rightarrow$  **oN** (MODE)  $\rightarrow$  3

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