

FEATURES

- Multi-range input (T/C, RTD, mV, V, mA, Etc)
- High accuracy 16bit A/D converter
- Peak hold function (Highest & Lowest)
- RS-485 Communication interface
- 2, 4 points alarm & Dead band set
- Burnout function
- Isolation current output (DC 4.00~20.00mA) & Output scaling
- Sensor power source DC 24V in STD specification
- Free voltage (AC 85~265V, 45~65Hz)



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
Isolation resistance(Input-Output) : 100M Ω or more
(DC 500V)

▶ Alarm output(Alarm setter)

- Contact output type : Normal open, Normal close
- 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 $^{\circ}$ C, 10~90%
- Storage : -20~70 $^{\circ}$ C, 5~95%

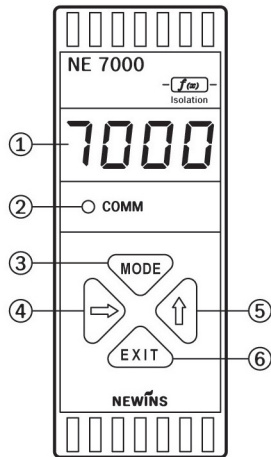
▶ Power supply

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

▶ Etc

- Weight : 200g
- Mounting : Din rail & wall mounted
- Dimension : 30.5(W) X 80(H) X 102(D)mm

PARTS NAME



- ① Measured value display
- ② Communication lamp
- ③ **MODE** Key :
Storage the set data and change the operation menu
- ④ **Enter** Key :
Enter into the data setting mode and modify the changed location
- ⑤ **Up** Key :
Change the data value
- ⑥ **EXIT** Key :
Out of mode

INPUT TYPE

Sensor Type	Range	Scale	Symbol
TC	B(PR)	0~1800℃	-
	R(PR)	0~1750℃	-
	S(PR)	0~1750℃	-
	K(CA)	-200~1350℃	-
	E(CRC)	-199.9~700.0℃	-
	J(IC)	-199.9~800.0℃	-
Volt	T(CC)	-199.9~400.0℃	-
	mV	-50.0~50.0mV	-1999~9999
	Volt	-1.000~1.000V	-1999~9999
mA	Volt	-10.0~10.0V	-1999~9999
	mA	4.00~20.00mA	-1999~9999
PT	Pt100Ω	-199.9~800.0℃	-
	JPt100Ω	-199.9~500.0℃	-
Pot	500	0~500Ω	-1999~9999
	5k	0~5kΩ	-1999~9999

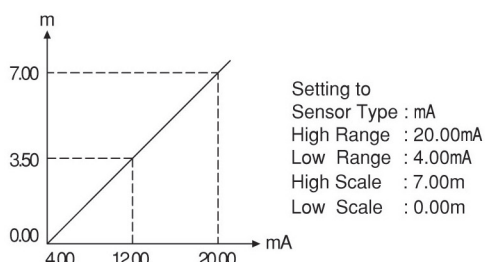
* mA input needs 250Ω(±0.1% 25ppm) resistance spiral on outside

MAJOR FUNCTIONS

Display scaling function(mV, Volt, mA only)

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

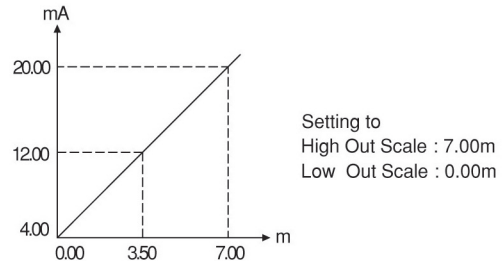
Ex) In case of input range 4.00~20.00mA and Level 0.00~7.00m



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)

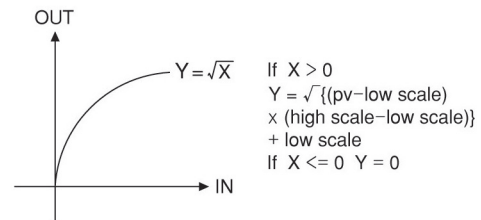
L in

Pass the input as it is.

Used for general input type and linearity input.

root

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

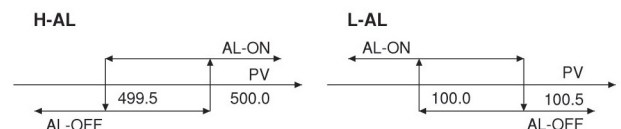
Ex) AL-1 : High alarm value 500.0,

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.



슬림형 변환기

SLIM TYPE ISOLATED CONVERTER(SOCKET)

▶ Sensor compensation function

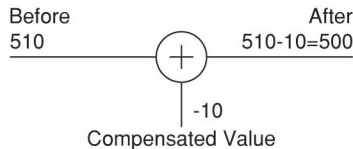
The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 510°C

After sensor adjust

= measured value + compensated value

= 510 - 10 = 500°C



▶ 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

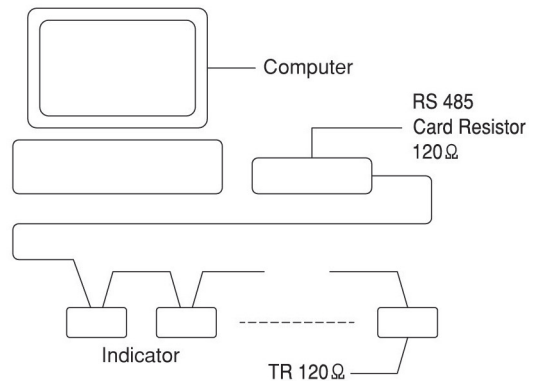
Remember the highest input value, display the highest value in ordinary times, and output the highest transmit output.

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

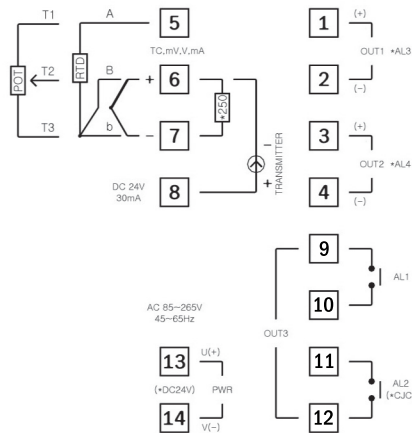
It is possible to communicate with computer and to monitor remote by using RS-485 communication interface.



ORDERING CODE

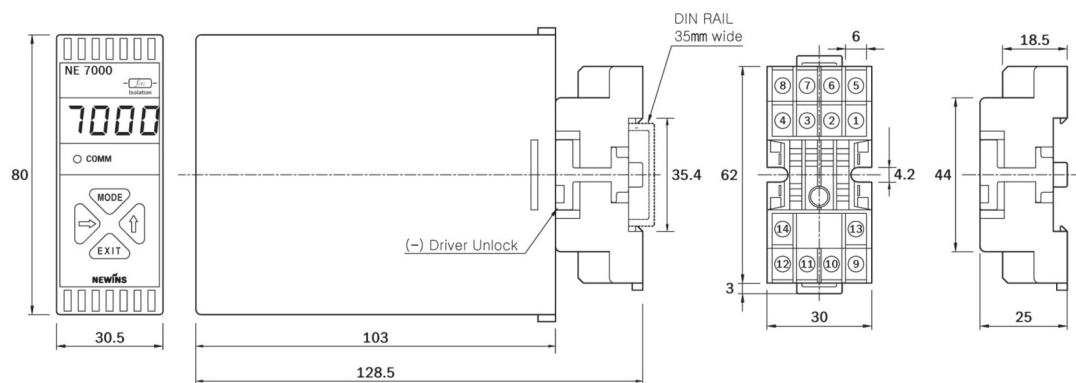
NE 70(*NE 73)		-	Description
Analog output	00		DC 4.00~20.00mA
	01		DC 4.00~20.00mA (2 Output)
	02		DC 1~5V
	03		DC 1~5V (2 Output)
	04		DC 0~10V
	05		DC 0~10V (2 Output)
	06		DC 4.00~20.00mA + 1Alarm
	07		DC 4.00~20.00mA + 2Alarm
	08		DC 1~5V + 1Alarm
	09		DC 1~5V + 2Alarm
	10		DC 4.00~20.00mA + RS-485
	11		DC 1~5V + RS-485
	12		Etc
Power		0	AC 85~265V (45~65Hz)
		1	DC 12~32V
		2	Etc

TERMINAL DIAGRAM



*NOTE
 1.mA Input (+,-)Needs 250 OHM 0.05% 25ppm Resistance
 2.*TC-TYPE CJC ONLY(AL2 NONE)

DIMENSION & PANEL CUT



* When mounting, no extra space is needed between units