NEWINS

2선식 온도 변환기

MODEL NT5500 series

2-wire SMART Temperature Transmitter

FEATURES

- **Multi-Range input (TC, RTD, Volt, mV, mA, etc)**
- **High accuracy 16bit A/D Converter**
- **Selectable moving average filter**
- **Built-in multiple function**
- **Isolation current output**
  (2wire 4.00~20.00mA) & Output scaling
- **4 Digit LCD for Parameter alteration and**
  PV output on the spot

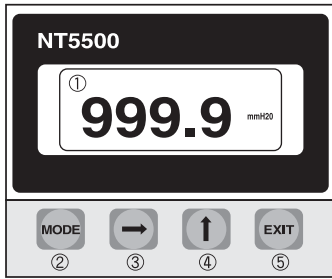CE 2005년 10월 예정

NT5500   NT5510

SPECIFICATIONS

- **Measuring and displaying interval** :
  200ms(mV, Volt, mA type)
  400ms(TC, RTD type)
- **Input resistance** : Volt Type 400㏀, Other Type 1㏁
- **Signal source resistance** :
  PT100Ω.. 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** : Selectable(None.04,08,16)
- **Accuracy**   : ±0.1%FS (Liner)
- **Power**   : DC 9~35Volt
- **Output**   : 2-Wire DC 4.00~20.00mA
  load limit (Vsp-9V)/0.022)=RΩ
- **Isolation resistance** : Input - output
  100㏁or more(500V DC)
- **Operation condition** : Operating Temp/Humidity
  -10~60℃, 10~90%
  Storage Temp/Humidity
  -20~70℃, 5~95%
- **Case material**   : ABS
- **Etc**   : Weight(180g)
  Mounting (Rail Mount)

INPUT TYPE

Type		Range	Scale	Simbol
TC	R(PR13%)	0~1750	−	tC-r
	K(CA)	-200~1350	-	tC-k
	E(CRC)	-200.0~700.0	-	tC-E
	J(IC)	-200.0~800.0	-	tC-J
	T(CC)	-200.0~400.0	-	tC-t
Volt	mV	-100.0~100.0mV	-1999~9999	ñu
	Volt	-1000~1000mV	-1999~9999	u
mA	mA	4.00~20.00mA	-1999~9999	ñA
PT	Pt100Ω	-200.0~800.0℃	-	Pt
	JPT100Ω	-200.0~500.0℃	-	JPt

mA input needs 20Ω 0.05% 25ppm resistance
Spiral on outside

PART NAME
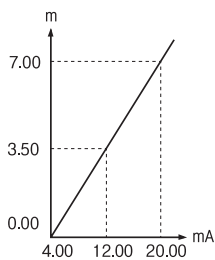

NT5500

① **999.9** mmH₂O

MODE ② | → ③ | ↑ ④ | EXIT ⑤

① **LCD Window** : Measured value display and Unit Message display
② **MODE Key**: Storage the set date and change the operation menu
③ **SHIFT Key** : Enter into the data setting mode And modify the changed location
④ **UP key**:Change the data value
⑤ **EXIT Key**:Out of mode

MAJOR FUNCTION

• **Display scaling function(mV, Volt, mA only)** :

This Function changes and sets display value according to scale and input range.
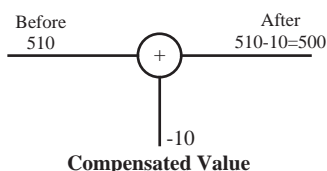Ex)In case of input range 4.00~20.00mA and Level 0.00~7.00m

Setting to
Sensor type : mA
High Range : 20.00mA
Low Range : 4.00mA
High Scale : 7.00
Low Scale : 0.00

• **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

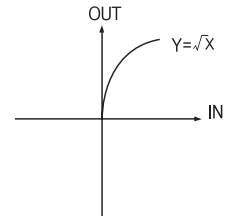After sensor adjust=measured value+compensated value
=510-10=500

Compensated Value

• **Function(mV, Volt, mA type only)**

| Lin | pass the input as it is. Used for general input type and linearity input.

| S-rt | Pass the input after √. Used for flow rate by orifice.

if x > 0
Y=√ {(pv-low scale)
X(high scale-low scale)}
+low scale
if x < =0 Y=0

| Lint | Like level measuring, when it does not display measuring under zero, it always can display zero by using Limit function.
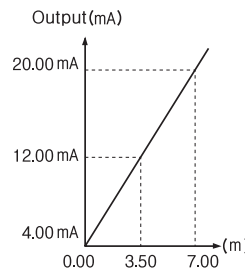
• **Output scaling function**

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 setting to

High out scale:7.00 Low out scale:0.00

Setting to
High out Scale : 7.00
Low out Scale : 0.00

• **Filter function**

Filter is moving average filter and it has 4 kinds of function.

| nonE | it displays the change of input with out filter.

| Av4,8,16 | it displays in recent input No 4,8,16 sample average.

Setting filter function delays reponse. Do not use filter when high speed response is needed.

When output and display value are changed by irregular input, it is possibble to get regular input and display value by using filter function
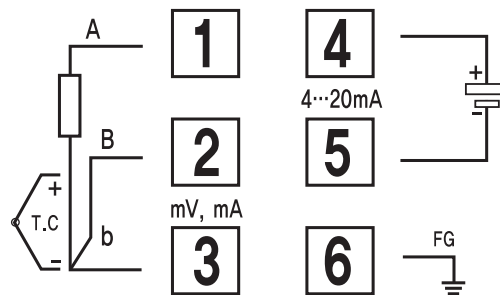
ORDERING CODE

MODEL	INDICATOR	DESCRIPTION	ETC
NT5500	0 0	None	Vertical
	1 0	With LCD	Horizontal

NOTE : Temperature sensor is separate way subject of discussion
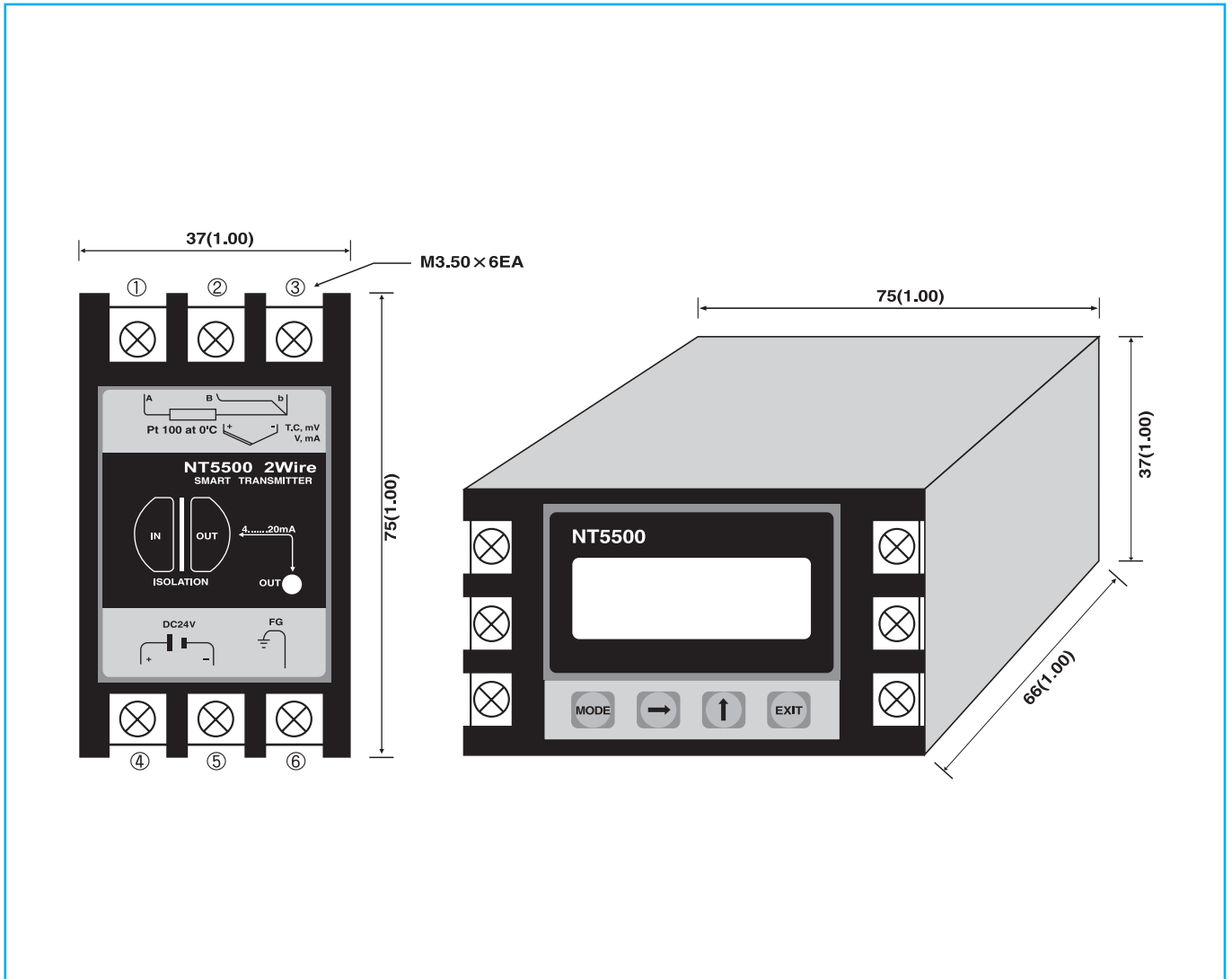
TERMINAL DIAGRAM

ISOLATED 2-WIRE TRANSMITTER

NOTE

1. Change hte bottem S/W when from T/C, mv and V to RTD, to T/C RTD.

2. mA input neads 20 Ω 0.05% 25ppm resistance spiral on outside.

DIMENSION

37(1.00)

M3.50×6EA

① ② ③

A   B   b
Pt 100 at 0℃   T.C, mV
                    V, mA

NT5500 2Wire
SMART TRANSMITTER

IN   OUT   4.......20mA

ISOLATION   OUT

DC24V   FG

75(1.00)

④ ⑤ ⑥

75(1.00)

37(1.00)

66(1.00)

NT5500

MODE → ↑ EXIT

For further information, a quotation or a demonstration
please contact to

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NEWINS

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