

# 1 ISOLATED OUTPUTS CONVERTER

## ■ FEATURE

- 1 Isolated output
- Actualization of high accuracy
- AC110V, AC220V, DC24V Power supply
- CE Approved

DP - SERIES



CE

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# General Specifications

# **SIGNAL ISOLATOR & POWER DISTRIBUTOR**

## 1出力 信號絶緣 變換器 & 傳送器用 電源



This instrument is a high accurate converter that provides simultaneously all transmitters such as pressure transmitter, flow transmitter, and level transmitter with power supply and signal conversion. Also, it contains overcurrent and overvoltage protection circuit inside. It is totally isolated between input signal from transmitter and output signal of a converter so it does not need extra isolator when the loop is contructed.

In the mounting method is PLUG-IN mounting.

## *SPECIFICATIONS*

<b>ITEMS</b>	<b>DESCRIPTIONS</b>			
<b>OUTPUT RATING SUPPLY TO X' TR</b>	<i>DC 24V 30mA Max, Ripple : less than 0.1Vp-p</i>			
<b>OUTPUT</b>	<i>DC Current or DC Voltage signal</i>			
<b>ACCURACY</b>	$\pm 0.1\%$ Max,			
<b>TEMP. COEFFICIENT</b>	$\pm 0.015\% / ^\circ C$			
<b>RESPONSE TIME</b>	<i>Less than 0.5Sec (0~90%)</i>			
<b>INSULATION RESISTANCE</b>	<i>Greater than 100MΩ at DC 500V</i>			
<b>DIELECTRIC - STRENGTH</b>	<i>Input - Power</i>	<i>AC 1,500V</i>	<i>1 Minute</i>	
	<i>Input - Output1</i>	<i>AC 1,500V</i>		
<b>POWER SUPPLY</b>	<i>AC 110/220V <math>\pm 10\%</math>, 50/60Hz</i>			
	<i>ISOLATOR : 3.5VA</i>			
	<i>POWER DISTRIBUTOR : 4VA</i>			
<b>AMBIENT - TEMP</b>	<i>-5 ~ +55°C ( 23 ~ 131 °F )</i>			
<b>HUMIDITY</b>	<i>Less than 90% RH ( no condensation )</i>			
<b>CASE MATERIAL</b>	<i>ABS</i>			
<b>COLOR</b>	<i>Black</i>			
<b>WEIGHT</b>	<i>About 400g</i>			
<b>DIMENSION</b>	<i>W50 X H80 X D128mm</i>			
<b>MOUNTING</b>	<i>DIN RAIL</i>			

ORDERING CODE

### *MODEL : DPIP -*

- *INPUT SIGNAL*

- 4-20mA DC (2-Wire DC24V)

• *OUTPUT SIGNAL*

- |    |                                      |    |                    |
|----|--------------------------------------|----|--------------------|
| 1. | $0\sim 1mA$ DC                       | A. | $0\sim 10mV$ DC    |
| 2. | $0\sim 10mA$ DC                      | B. | $0\sim 100mV$ DC   |
| 3. | $0\sim 16mA$ DC                      | C. | $0\sim IV$ DC      |
| 4. | $0\sim 20mA$ DC                      | D. | $0\sim 5V$ DC      |
| 5. | $1\sim 5mA$ DC                       | E. | $0\sim 10V$ DC     |
| 6. | $2\sim 10mA$ DC                      | F. | $1\sim 5V$ DC      |
| 7. | $4\sim 20mA$ DC                      | Z. | Other Voltage      |
| 0. | Other Current<br>(Less than $20mA$ ) |    | (Less than $12V$ ) |

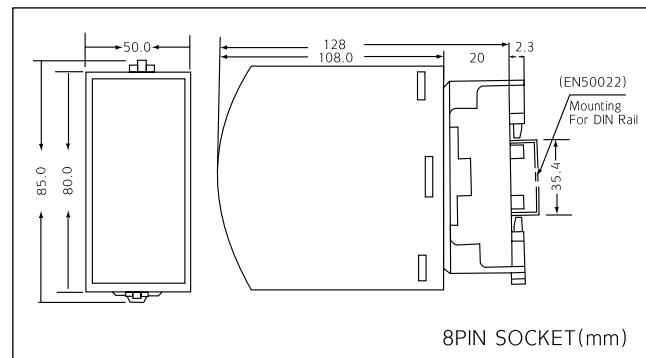
### • POWER SUPPLY

1. AC 110V    2. AC 220V    3. DC 24V

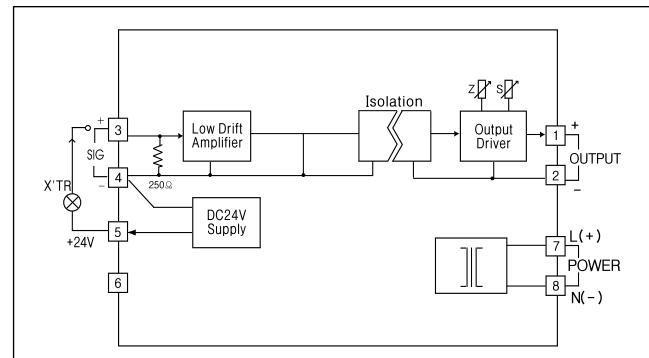
#### ■ *OUTPUT LOAD RESISTANCE*

<i>OUTPUT SIGNAL</i>	<i>LOAD RESISTANCE</i>
<i>DC 4~20mA</i>	<i>Less than 600Ω</i>
<i>DC 1~5V</i>	<i>More than 2.5KΩ</i>
<i>DC 0~10V</i>	<i>More than 5KΩ</i>

DIMENSION



## BLOCK DIAGRAM



# General Specifications



CE

## R.T.D CONVERTER

測溫抵抗體 變換器

This instrument is a high and accurate converter that receives RTD as an input signal then converts resistance variations into DC voltage and DC current output signal following the temperature. Also the feed back circuit developed by our company actualized high accurate linearization and compensation of line resistance. In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

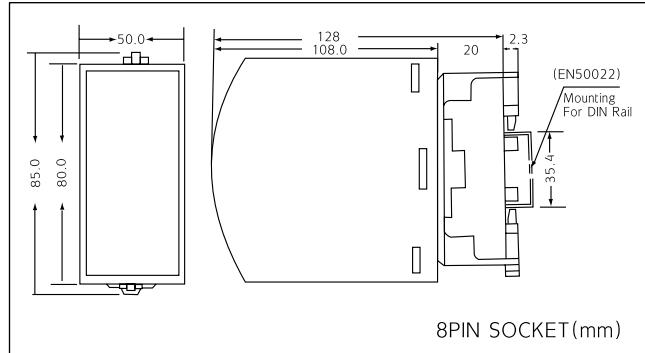
ITEMS	DESCRIPTIONS
INPUT	Pt 100Ω 3-Wire (Over 50deg) Adjustment needed for 2wire Bulb Permissible resistance of cable less than 100Ω
SUPPLY CURRENT TO Pt BULB	DC 2mA
BURN - OUT	Upper Limit
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.02% / °C
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power      AC 1,500V Input - Output    AC 1,500V      1 Minute
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA DC 24V ± 10% 110mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131°F)
HUMIDITY	Less than 90% RH (no condensation)
LINEARIZER	Standard Function
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 400g
DIMENSION	W50 X H80 X D128mm
MOUNTING	DIN RAIL

### ■ STANDARD INPUT RANGE

(UNIT : °C)

INPUT	RANGE
Pt 100Ω	0~50, 0~100, 0~150, 0~200, 0~250, 0~300, 0~400 0~500, -20 ~ +80, -50 ~ +50, -50 ~ +150, 50~100 50~150, 100~200, 100~300, 200~400

### DIMENSION



### ORDERING CODE

MODEL : DPRB -   -  /

#### • INPUT SIGNAL

- 1. JPt 100Ω (JIS) 3-Wire
- 2. Pt 100Ω (DIN) 3-Wire
- 3. Others

#### • OUTPUT SIGNAL

- |                                      |                  |
|--------------------------------------|------------------|
| 1. 0~1mA DC                          | A. 0~10mV DC     |
| 2. 0~10mA DC                         | B. 0~100mV DC    |
| 3. 0~16mA DC                         | C. 0~1V DC       |
| 4. 0~20mA DC                         | D. 0~5V DC       |
| 5. 1~5mA DC                          | E. 0~10V DC      |
| 6. 2~10mA DC                         | F. 1~5V DC       |
| 7. 4~20mA DC                         | Z. Other Voltage |
| 0. Other Current<br>(Less than 20mA) | (Less than 12V)  |

#### • POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

#### • BURN OUT

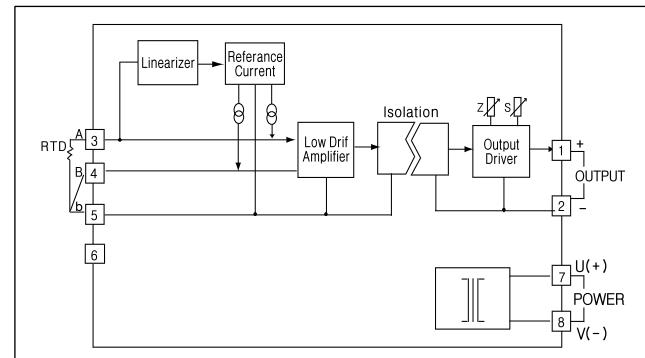
- U. Up scale

\* Please Specify the Input Range When you Order.

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

### BLOCK DIAGRAM



# General Specifications



CE

## THERMOCOUPLE CONVERTER

熱電對 變換器

This instrument is a high accurate converter that receives various T/C as an input signal and converts the TC temperature into DC current and DC voltage through the temperature compensation and linear circuit that correspond to the various TC. Input, output and power have isolation circuit that is separated from each other.

In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

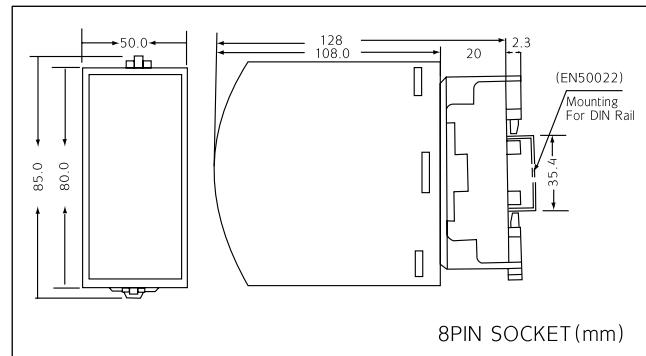
ITEMS	DESCRIPTIONS					
INPUT	Thermocouple ( K, J, T, E, B, R, S )					
BURN - OUT	Upper Limit					
OUTPUT	DC Current or DC Voltage signal					
ACCURACY	$\pm 0.3\%$ Max.					
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$					
RESPONSE TIME	Less than 0.5Sec (0~90%)					
INSULATION RESISTANCE	Greater than 100M $\Omega$ at DC 500V					
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> <td rowspan="2">1 Minute</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> </tr> </table>	Input - Power	AC 1,500V	1 Minute	Input - Output	AC 1,500V
Input - Power	AC 1,500V	1 Minute				
Input - Output	AC 1,500V					
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA DC 24V $\pm 10\%$ 110mA					
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F )					
HUMIDITY	Less than 90% RH ( no condensation )					
LINEARIZER	Standard Function					
CASE MATERIAL	ABS					
COLOR	Black					
WEIGHT	About 400g					
DIMENSION	W50 X H80 X D128mm					
MOUNTING	DIN RAIL					

### ■ STANDARD INPUT RANGE

(UNIT : °C)

INPUT	RANGE
K	-50~+100, 0~300, 0~400, 0~500, 0~600 0~800, 0~1000, 0~1200
J	0~200, 0~300, 0~400, 0~800
T	-20~80, 0~100, 0~200
R	600~1600

### DIMENSION



### ORDERING CODE

MODEL : DPTC -  -  /

• INPUT SIGNAL

- 1. K(CA)
- 2. J(IC)
- 3. T(CC)
- 4. E(CRC)
- 5. B
- 6. S
- 7. R
- 8. Other Thermocouple

• OUTPUT SIGNAL

- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 8. Other Current  
(Less than 20mA)
- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- Z. Other Voltage

• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

• BURN OUT

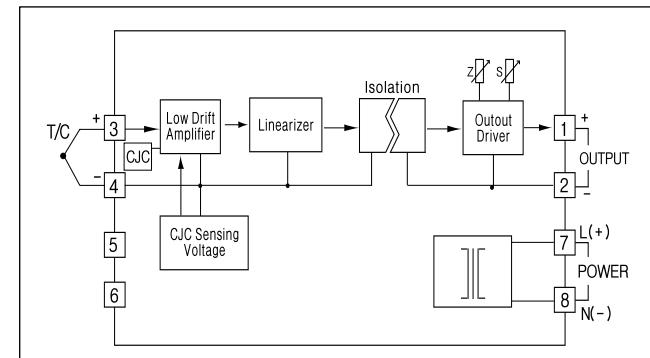
- U. Up scale

\* Please Specify the Input Range When you Order.

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600 $\Omega$
DC 1~5V	More than 2.5K $\Omega$
DC 0~10V	More than 5K $\Omega$

### BLOCK DIAGRAM



# General Specifications



CE

## POTENTIOMETER CONVERTER

可變抵抗變換器

This instrument is a high and accurate converter that receives resistance signal of 3 wires potentiometer ( $100\Omega \sim 100K\Omega$ ) and converts then into DC voltage and current.

Especially, it is widely used for float type water level detector and mutual interference by Zero adjustment and Span adjustment is hardly occurred.

In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT	Potentiometer ( from $100\Omega \sim 100K\Omega$ )	
OUTPUT	DC Current or DC Voltage signal	
ACCURACY	$\pm 0.2\%$ Max.	
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ C$	
RESPONSE TIME	Less than 0.5Sec (0~90%)	
INSULATION RESISTANCE	Greater than $100M\Omega$ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA DC 24V $\pm 10\%$ 110mA	
AMBIENT - TEMP	$-5 \sim +55^\circ C$ ( $23 \sim 131^\circ F$ )	
HUMIDITY	Less than 90% RH (no condensation)	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ORDERING CODE

MODEL : DPPC -

• INPUT SIGNAL

POTENTIOMETER( Total resistance  $100\Omega \sim 100K\Omega$  )

• OUTPUT SIGNAL

- |                                      |                  |
|--------------------------------------|------------------|
| 1. 0~1mA DC                          | A. 0~10mV DC     |
| 2. 0~10mA DC                         | B. 0~100mV DC    |
| 3. 0~16mA DC                         | C. 0~1V DC       |
| 4. 0~20mA DC                         | D. 0~5V DC       |
| 5. 1~5mA DC                          | E. 0~10V DC      |
| 6. 2~10mA DC                         | F. 1~5V DC       |
| 7. 4~20mA DC                         | Z. Other Voltage |
| 0. Other Current<br>(Less than 20mA) | (Less than 12V)  |

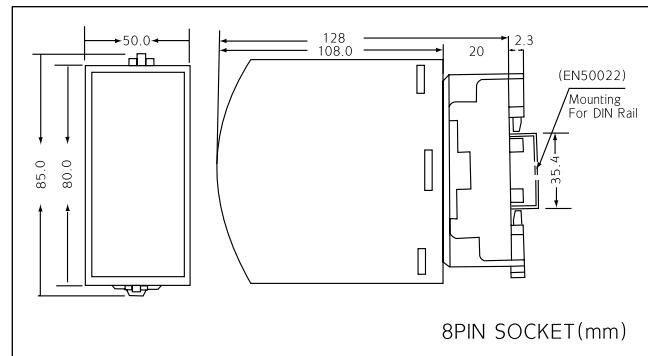
• POWER SUPPLY

1. AC 110V 2. AC 220V 3. DC 24V

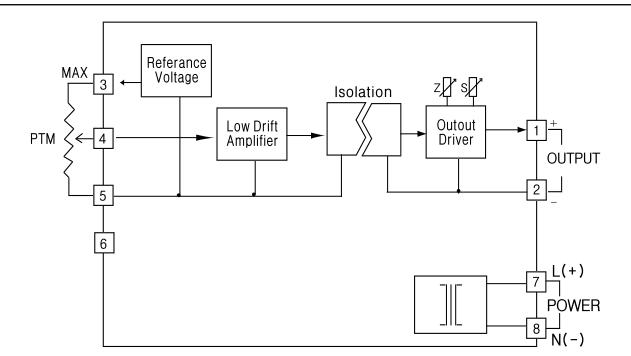
### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than $600\Omega$
DC 1~5V	More than $2.5K\Omega$
DC 0~10V	More than $5K\Omega$

### DIMENSION



### BLOCK DIAGRAM



# General Specifications



CE

## SIGNAL ISOLATOR

信号絶縁 変換器

This instrument receives DC voltage and current as an input signal and provides conversion output when the input & output is separated completely. Especially, an input, an output, and power are isolated using a transformer and it is called 3 ways isolator.

This instrument is a high accurate converter which is the most suitable to prevent impulse noise and high peak voltage from the interval between field instrument and computer interface.

In the mounting method is PLUG-IN mounting.

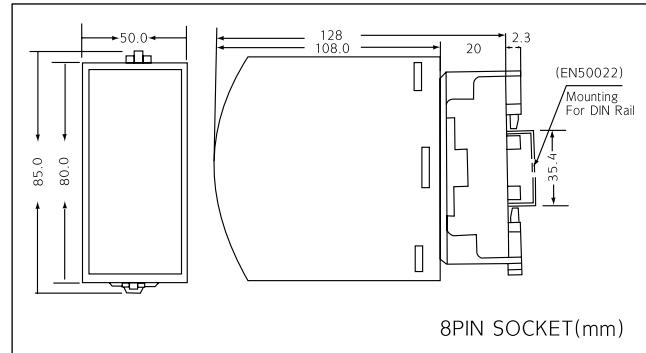
### SPECIFICATIONS

ITEMS	DESCRIPTIONS					
INPUT	DC Current or DC Voltage signal					
OUTPUT	DC Current or DC Voltage signal					
ACCURACY	$\pm 0.1\% \text{ Max.}$					
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ\text{C}$					
RESPONSE TIME	Less than 0.5Sec (0~90%)					
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V					
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> <td rowspan="2">1 Minute</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> </tr> </table>	Input - Power	AC 1,500V	1 Minute	Input - Output	AC 1,500V
Input - Power	AC 1,500V	1 Minute				
Input - Output	AC 1,500V					
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA DC 24V $\pm 10\%$ 110mA					
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131°F)					
HUMIDITY	Less than 90% RH (no condensation)					
CASE MATERIAL	ABS					
COLOR	Black					
WEIGHT	About 400g					
DIMENSION	W50 X H80 X D128mm					
MOUNTING	DIN RAIL					

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPSI -   -

• INPUT SIGNAL

- 1. 0~1mA DC      A. 0~10mV DC
- 2. 0~10mA DC    B. 0~100mV DC
- 3. 0~16mA DC    C. 0~1V DC
- 4. 0~20mA DC    D. 0~5V DC
- 5. 1~5mA DC     E. 0~10V DC
- 6. 2~10mA DC    F. 1~5V DC
- 7. 4~20mA DC    G. Other Voltage
- 0. Other Current    H. Other Current

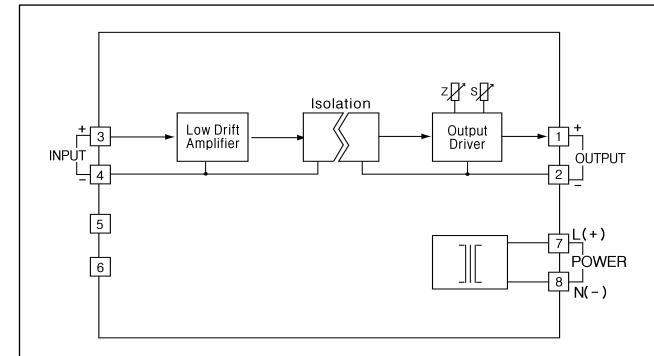
• OUTPUT SIGNAL

- 1. 0~1mA DC      A. 0~10mV DC
- 2. 0~10mA DC    B. 0~100mV DC
- 3. 0~16mA DC    C. 0~1V DC
- 4. 0~20mA DC    D. 0~5V DC
- 5. 1~5mA DC     E. 0~10V DC
- 6. 2~10mA DC    F. 1~5V DC
- 7. 4~20mA DC    G. Other Voltage
- 0. Other Current    H. Other Current  
(Less than 12V)

• POWER SUPPLY

- 1. AC 110V    2. AC 220V    3. DC 24V

### BLOCK DIAGRAM



# General Specifications



CE

## HIGH SPEED ISOLATOR

### 高速 信号絶縁 変換器

This instrument receives DC voltage and current as an input signal and provides conversion output when the input & output is separated completely. Especially, an input, an output and power are isolated using a transformer and it is called "3 ways isolator".

This instrument is a high speed response converter like computer interface.

In the mounting method is PLUG-IN mounting.

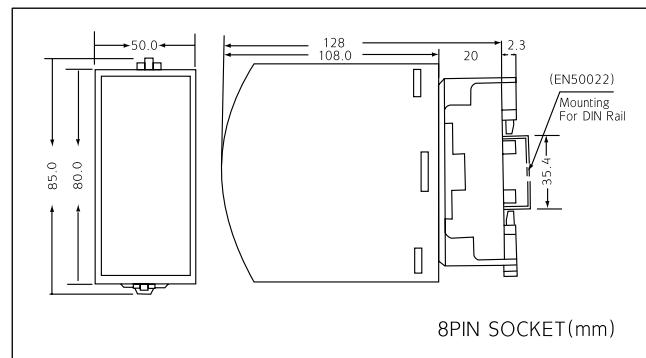
### SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	$\pm 0.1\%$ Max.
TEMP. COEFFICIENT	$\pm 0.025\% / ^\circ C$
RESPONSE TIME	Less than 10mSec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V Input - Output AC 1,500V
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131°F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 400g
DIMENSION	W50 X H80 X D128mm
MOUNTING	DIN RAIL

### ■ OUTPUT LOAD RESISTANCE

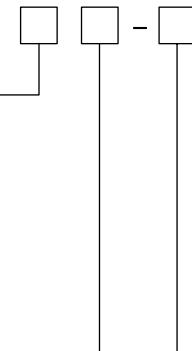
OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPHI -



#### • INPUT SIGNAL

- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 0. Other Current

- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- Z. Other Voltage

#### • OUTPUT SIGNAL

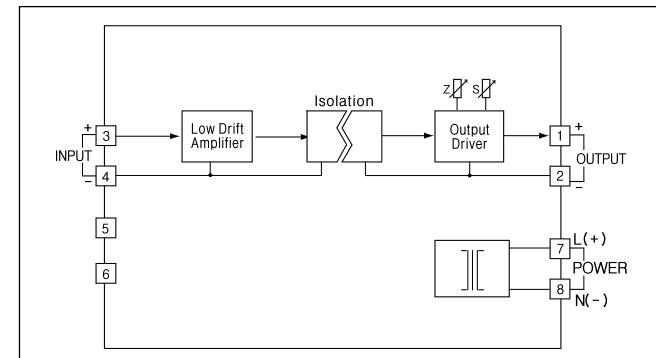
- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 0. Other Current  
(Less than 20mA)

- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- Z. Other Voltage  
(Less than 12V)

#### • POWER SUPPLY

- 1. AC 110V
- 2. AC 220V

### BLOCK DIAGRAM



# General Specifications



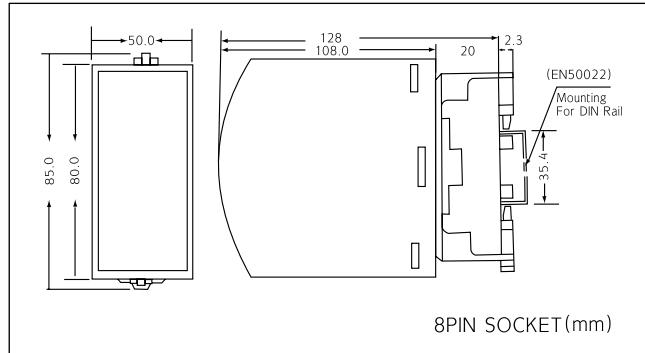
## SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	$\pm 0.1\% \text{ Max.}$
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ\text{C}$
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V Input - Output AC 1,500V      1 Minute
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA DC 24V ± 10% 110mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 400g
DIMENSION	W50 X H80 X D128mm
MOUNTING	DIN RAIL

## ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

## DIMENSION



# REVERSE CONVERTER

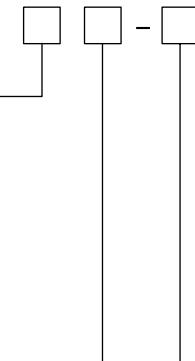
## 逆信號 變換器

This instrument receives DC voltage and current as an input signal then reverses output signals of all instrument if the reverse is needed. Especially, an input, an output, and power are isolated by a transformer and it is called "3 ways isolator".

In the mounting method is PLUG-IN mounting.

## ORDERING CODE

MODEL : DPRC -



### • INPUT SIGNAL

- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 0. Other Current

- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- Z. Other Voltage

### • OUTPUT SIGNAL

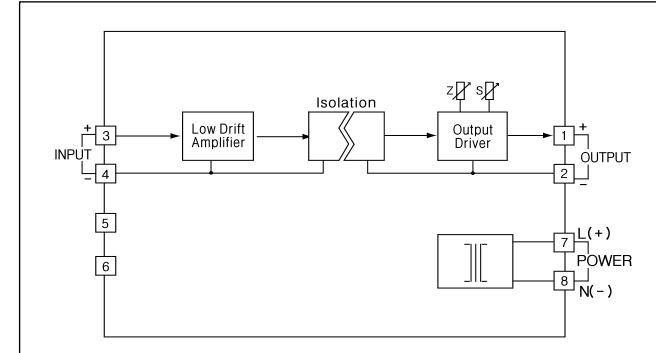
- 1. 1~0mA DC
- 2. 10~0mA DC
- 3. 16~0mA DC
- 4. 20~0mA DC
- 5. 5~1mA DC
- 6. 10~2mA DC
- 7. 20~4mA DC
- 0. Other Current  
(Less than 20mA)

- A. 10~0mV DC
- B. 100~0mV DC
- C. 1~0V DC
- D. 5~0V DC
- E. 10~0V DC
- F. 5~1V DC
- Z. Other Voltage

### • POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

## BLOCK DIAGRAM



## General Specifications



CE

## STRAIN GAUGE CONVERTER

Strain gauge 變換器

This instrument converts Load cell or strain gauge as an input signal into DC voltage or current.

It actualizes a high and accurate performance that residual magnetic voltage selects constant voltage and amplifier circuit select low noise type.

In the mounting method is PLUG-IN mounting.

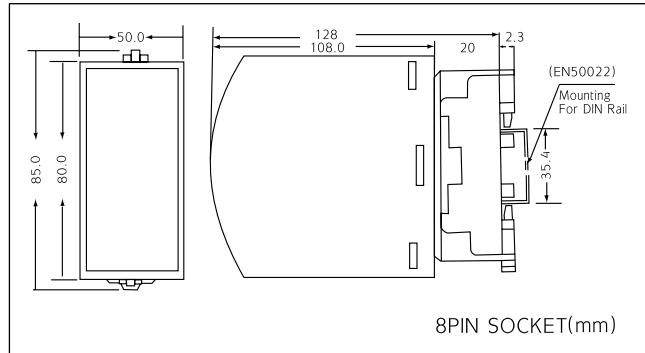
### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
LOAD CELL TO BE COMBINED	Bridge Resistance 350Ω or more rated output Voltage 2mV/V and other	
APPLIED VOLTAGE	DC 10V(Standard)	
OUTPUT	DC Current or DC Voltage signal	
ACCURACY	$\pm 0.2\%$ Max.	
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$	
RESPONSE TIME	Less than 0.5Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V 1 Minute
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 4VA DC 24V $\pm 10\%$ 110mA	
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F )	
HUMIDITY	Less than 90% RH ( no condensation )	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPLS -   -

• EXT. VOLTAGE

- 1. DC 5V
- 2. DC 10V
- 3. Other Voltages

• LOAD CELL

- 1. 2mV/V
- 2. Other

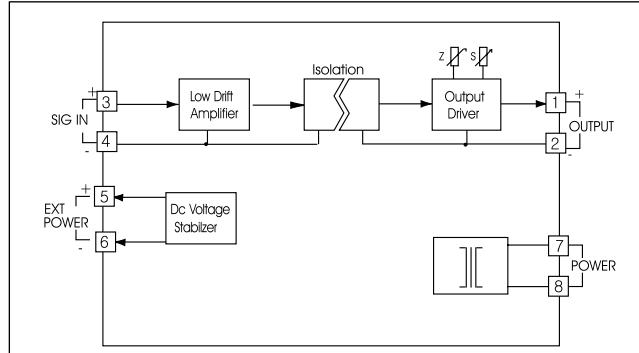
• OUTPUT SIGNAL

- |                                      |                   |
|--------------------------------------|-------------------|
| 1. 0~1mA DC                          | A . 0~10mV DC     |
| 2. 0~10mA DC                         | B . 0~100mV DC    |
| 3. 0~16mA DC                         | C . 0~1V DC       |
| 4. 0~20mA DC                         | D . 0~5V DC       |
| 5. 1~5mA DC                          | E . 0~10V DC      |
| 6. 2~10mA DC                         | F . 1~5V DC       |
| 7. 4~20mA DC                         | Z . Other Voltage |
| 0. Other Current<br>(Less than 20mA) | (Less than 12V)   |

• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

### BLOCK DIAGRAM



# General Specifications



## TACHOGENERATOR CONVERTER

回轉數 變換器

This is high accurate instrument which the value corresponding to RPM of tachogenerator converts to DC current and voltage signal as receiving input of output signal by tachogenerator.

This is a high and accurate instrument that has an output signal by tachogenerator converter as an input and converts values correspond to RPM of tachogenerator to DC and voltage signals.

In the mounting method is PLUG-IN mounting.

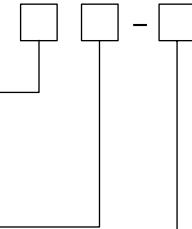
CE

### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT IMPEDANCE	150KΩ or More	
OUTPUT	DC Current or DC Voltage signal	
ACCURACY	±0.3% Max.	
TEMP. COEFFICIENT	±0.02% / °C	
RESPONSE TIME	Less than 0.5Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V 1 Minute
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA DC 24V ± 10% 110mA	
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F)	
HUMIDITY	Less than 90% RH ( no condensation )	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ORDERING CODE

MODEL : DPTG -



#### • INPUT SIGNAL

- 1. AC 0 ~ 35V (100Hz ~ 1KHz)
- 2. Specify Range (AC 20 ~ 150V)

#### • OUTPUT SIGNAL

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| 1. 0~1mA DC                          | A . 0~10mV DC                        |
| 2. 0~10mA DC                         | B . 0~100mV DC                       |
| 3. 0~16mA DC                         | C . 0~1V DC                          |
| 4. 0~20mA DC                         | D . 0~5V DC                          |
| 5. 1~5mA DC                          | E . 0~10V DC                         |
| 6. 2~10mA DC                         | F . 1~5V DC                          |
| 7. 4~20mA DC                         | G . Other Voltage                    |
| 8. Other Current<br>(Less than 20mA) | H . Other Voltage<br>(Less than 12V) |

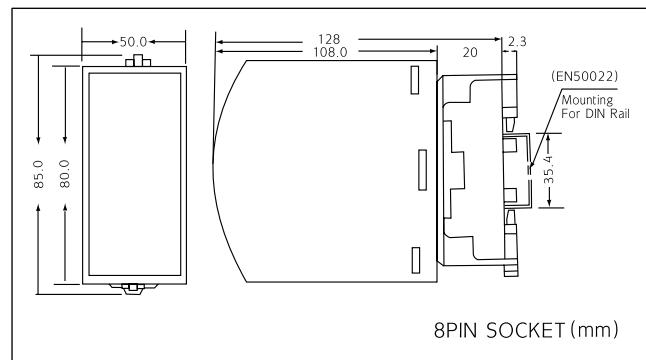
#### • POWER SUPPLY

- 1 . AC 110V
- 2 . AC 220V
- 3 . DC 24V

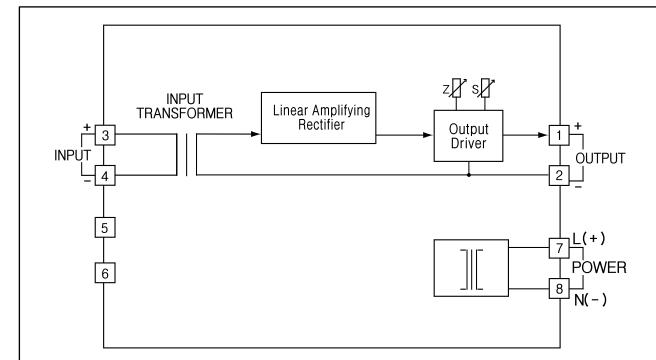
### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### BLOCK DIAGRAM



# General Specifications



CE

## HIGH/LOW SELECTOR

信號選擇器

This instrument has two different input signals in all process amounts.(temperature, flow, pressure, components, etc)

Then the instrument compares two signals to select the highest or lowest value to output. It is used for a variable control of process control and alternative amounts control.

In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS					
INPUT	DC Voltage(1~5V) or DC Current(4~20mA)Signal					
OUTPUT	DC Voltage(1~5V) or DC Current(4~20mA)Signal					
NUMBER OF INPUT	2					
ACCURACY	$\pm 0.2\% \text{ Max.}$					
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$					
RESPONSE TIME	Less than 0.5Sec (0~90%)					
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V					
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> <td rowspan="2">1 Minute</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> </tr> </table>	Input - Power	AC 1,500V	1 Minute	Input - Output	AC 1,500V
Input - Power	AC 1,500V	1 Minute				
Input - Output	AC 1,500V					
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 4VA					
AMBIENT - TEMP	-5 ~ +55 °C ( 23 ~ 131 °F )					
HUMIDITY	Less than 90% RH ( no condensation )					
CASE MATERIAL	ABS					
COLOR	Black					
WEIGHT	About 400g					
DIMENSION	W50 X H80 X D128mm					
MOUNTING	DIN RAIL					

### ORDERING CODE

MODEL : DPHL -    -

• SELECTING FUNCTION

- 1. Low Signal
- 2. High Signal

• INPUT SIGNAL

- 7. 4~20mA DC
- 0. Other Current  
(Less than 20mA)
- F. 1~5V DC
- Z. Other Voltage  
(Less than 12V)

• OUTPUT SIGNAL

- 7. 4~20mA DC
- 0. Other Current  
(Less than 20mA)
- F. 1~5V DC
- Z. Other Voltage  
(Less than 12V)

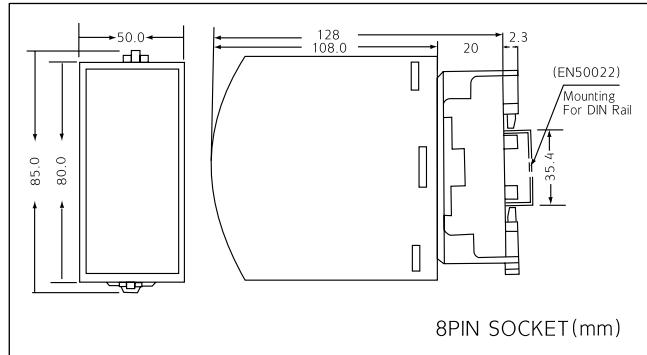
• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V

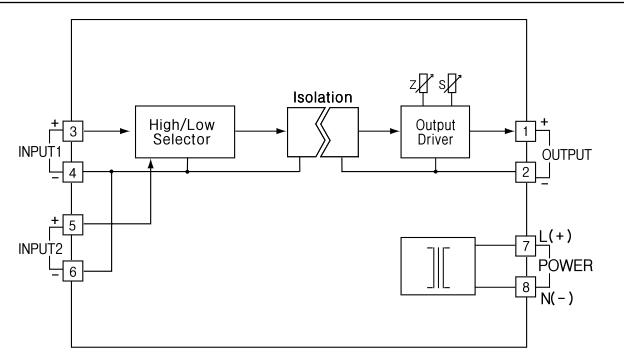
### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### BLOCK DIAGRAM



# General Specifications



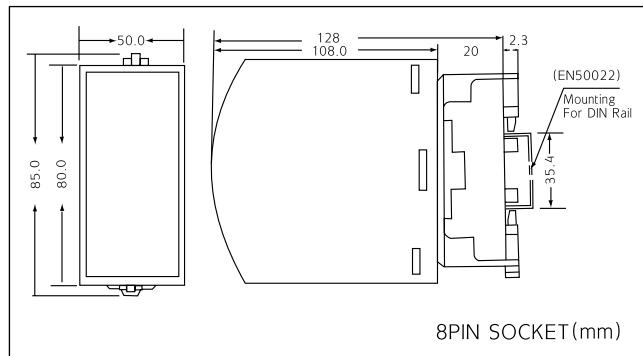
## SPECIFICATIONS

ITEMS	DESCRIPTIONS					
INPUT	DC Current or DC Voltage signal					
OUTPUT	DC Current or DC Voltage signal					
ACCURACY	$\pm 0.1\%$ Max.					
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ C$					
RESPONSE TIME	Less than 0.5Sec (0~90%)					
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V					
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> <td rowspan="2">1 Minute</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> </tr> </table>	Input - Power	AC 1,500V	1 Minute	Input - Output	AC 1,500V
Input - Power	AC 1,500V	1 Minute				
Input - Output	AC 1,500V					
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA DC 24V $\pm 10\%$ 100mA					
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 121 °F)					
HUMIDITY	Less than 90% RH (no condensation)					
CASE MATERIAL	ABS					
COLOR	Black					
WEIGHT	About 400g					
DIMENSION	W50 X H80 X D128mm					
MOUNTING	DIN RAIL					

## ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

## DIMENSION



# SIGNAL LIMITER

信号制限器

This converter is possible to limit output range to high/low limit 0~100% as being Input of DC voltage and current output signal. It is used in limit control system in combination with output signal of main controller.  
In the mounting method is PLUG-IN mounting.

## ORDERING CODE

MODEL : DPSL -   -

### • SELECTING FUNCTION

- 1. Low Signal
- 2. High Signal

### • INPUT SIGNAL

- |                  |                  |
|------------------|------------------|
| 1. 0~1mA DC      | A. 0~10mV DC     |
| 2. 0~10mA DC     | B. 0~100mV DC    |
| 3. 0~16mA DC     | C. 0~1V DC       |
| 4. 0~20mA DC     | D. 0~5V DC       |
| 5. 1~5mA DC      | E. 0~10V DC      |
| 6. 2~10mA DC     | F. 1~5V DC       |
| 7. 4~20mA DC     | Z. Other Voltage |
| 0. Other Current |                  |

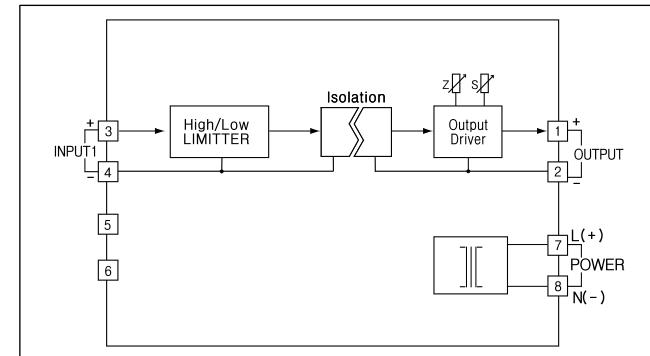
### • OUTPUT SIGNAL

- |                  |                  |
|------------------|------------------|
| 1. 0~1mA DC      | A. 0~10mV DC     |
| 2. 0~10mA DC     | B. 0~100mV DC    |
| 3. 0~16mA DC     | C. 0~1V DC       |
| 4. 0~20mA DC     | D. 0~5V DC       |
| 5. 1~5mA DC      | E. 0~10V DC      |
| 6. 2~10mA DC     | F. 1~5V DC       |
| 7. 4~20mA DC     | Z. Other Voltage |
| 0. Other Current | (Less than 20mA) |

### • POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

## BLOCK DIAGRAM



# General Specifications

## **ADDER & SUBTRACTOR**

加減演算器



This converter is used for addition and subtraction process of temperature and flow, etc.

This converter completes the best system combining computer console with each instrument such as controller, recorder, and integrator according to application positions.

In the mounting method is PLUG-IN mounting.

## *SPECIFICATIONS*

ITEMS	DESCRIPTIONS		
INPUT	<i>DC Voltage(1~5V) or DC Current(4~20mA)Signal</i>		
OUTPUT	<i>DC Voltage(1~5V) or DC Current(4~20mA)Signal</i>		
NUMBER OF INPUT	2		
ACCURACY	$\pm 0.2\%$ Max.		
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ C$		
RESPONSE TIME	Less than 0.5Sec (0~90%)		
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V		
DIELECTRIC - STRENGTH	<i>Input - Power</i>	<i>AC 1,500V</i>	<i>1 Minute</i>
	<i>Input - Output</i>	<i>AC 1,500V</i>	
POWER SUPPLY	<i>AC 110 / AC 220V <math>\pm 10\%</math>, 50/60Hz 3.5VA</i>		
	<i>DC 24V <math>\pm 10\%</math> 110mA</i>		
AMBIENT - TEMP	<i>-5 ~ +55°C (23 ~ 131 °F)</i>		
HUMIDITY	<i>Less than 90% RH (no condensation)</i>		
CASE MATERIAL	<i>ABS</i>		
COLOR	<i>Black</i>		
WEIGHT	<i>About 400g</i>		
DIMENSION	<i>W50 X H80 X D128mm</i>		
MOUNTING	<i>DIN RAIL</i>		

## *ORDERING CODE*

### *MODEL : DPAS -*

- *SELECTING FUNCTION*

#### • INPUT SIGNAL

7. *4~20mA DC*      F. *1~5V DC*  
 0. *Other Current*      Z. *Other Voltage*  
*(Less than 20mA)*      *(Less than 12V)*

### • *OUTPUT SIGNAL*

7. 4~20mA DC      F. 1~5V DC  
 0. Other Current      Z. Other Voltage  
 (Less than 20mA)      (Less than 12V)

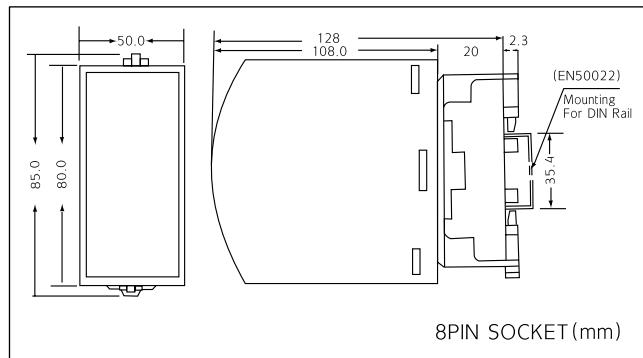
## • *POWER SUPPLY*

1. AC 110V    2. AC 220V    3. DC 24V

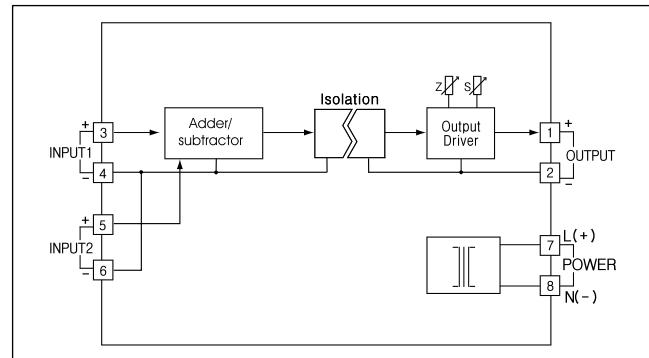
#### ■ *OUTPUT LOAD RESISTANCE*

<i>OUTPUT SIGNAL</i>	<i>LOAD RESISTANCE</i>
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



## BLOCK DIAGRAM



# General Specifications



## PEAK HOLDER

最高置 檢出器

This is a converter that receives DC voltage and current as inputs transmitted from field instrument or regulator, and then generates an alarm occurred by a point of contract or open collector output by an establishment of maximum and minimum values.

It is used for effective interlock according to a process condition. In the mounting method is PLUG-IN mounting.

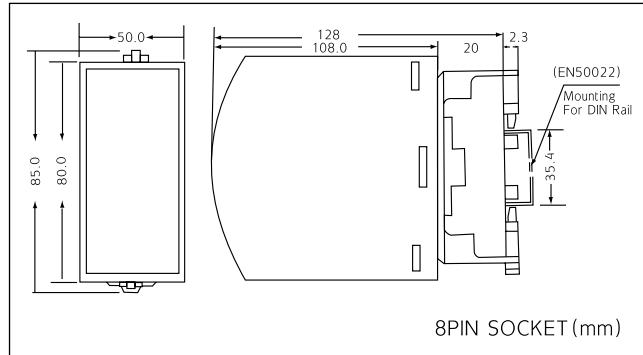
### SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	$\pm 0.3\% \text{ Max.}$
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ\text{C}$
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V Input - Output AC 1,500V      1 Minute
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 4VA DC 24V ± 10% 110mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 121 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 400g
DIMENSION	W50 X H80 X D128mm
MOUNTING	DIN RAIL
PEAK HOLD CONTROL	Hold with terminal ⑤-⑥ Open, Reset with ⑤-⑥ Short

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPPH -   -

• HOLD

- 1. Maximum Value (Standard)
- 2. Minimum Value (Option)

• INPUT SIGNAL

- |                  |                  |
|------------------|------------------|
| 1. 0~1mA DC      | A. 0~10mV DC     |
| 2. 0~10mA DC     | B. 0~100mV DC    |
| 3. 0~16mA DC     | C. 0~1V DC       |
| 4. 0~20mA DC     | D. 0~5V DC       |
| 5. 1~5mA DC      | E. 0~10V DC      |
| 6. 2~10mA DC     | F. 1~5V DC       |
| 7. 4~20mA DC     | Z. Other Voltage |
| 0. Other Current |                  |

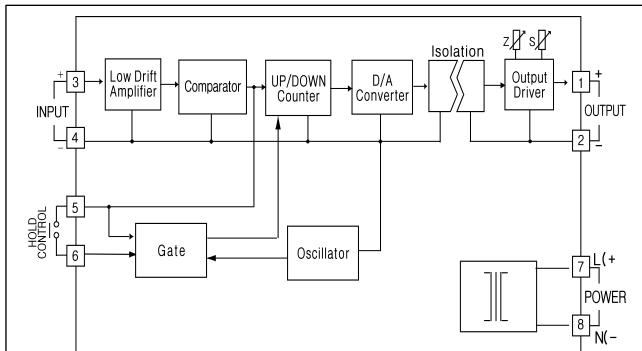
• OUTPUT SIGNAL

- |                  |                  |
|------------------|------------------|
| 1. 0~1mA DC      | A. 0~10mV DC     |
| 2. 0~10mA DC     | B. 0~100mV DC    |
| 3. 0~16mA DC     | C. 0~1V DC       |
| 4. 0~20mA DC     | D. 0~5V DC       |
| 5. 1~5mA DC      | E. 0~10V DC      |
| 6. 2~10mA DC     | F. 1~5V DC       |
| 7. 4~20mA DC     | Z. Other Voltage |
| 0. Other Current | (Less than 20mA) |

• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

### BLOCK DIAGRAM



# General Specifications

## AC VOLTAGE TRANSDUCER

交流電壓變換器



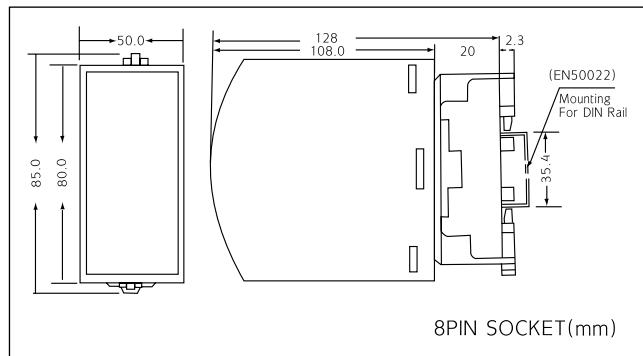
### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT LOSS	Less than 0.5VA	
OVER-INPUT	200% 1 minute	
OUTPUT	DC Current or DC Voltage Signal	
ACCURACY	$\pm 0.3\%$ Max.	
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$	
RESPONSE TIME	Less than 0.5Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power	AC 1,500V
	Input - Output	AC 1,500V
	1 Minute	
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA	
	DC 24V ± 10% 110mA	
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)	
HUMIDITY	Less than 90% RH (no condensation)	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPPT -   -

• INPUT SIGNAL

- 1. AC 0 ~ 110V
- 2. AC 0 ~ 150V
- 3. AC 0 ~ 300V
- 4. AC 0 ~ 600V
- 5. Other Voltage by specified

• OUTPUT SIGNAL

- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 8. Other Current  
(Less than 20mA)
- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- G. Other Voltage

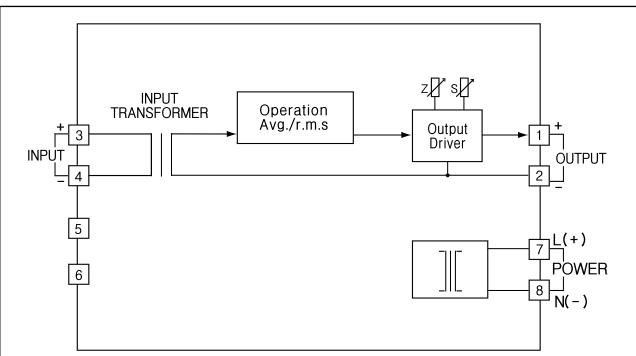
• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

• OPTION

- R. RMS Sensing

### BLOCK DIAGRAM



# General Specifications



## AC CURRENT TRANSDUCER

交流電流變換器

This instrument has alternating sinusoidal current as an input, and then calculates an average value and converts it into DC signal proportional to an effective value of input.

In the mounting method is PLUG-IN mounting.

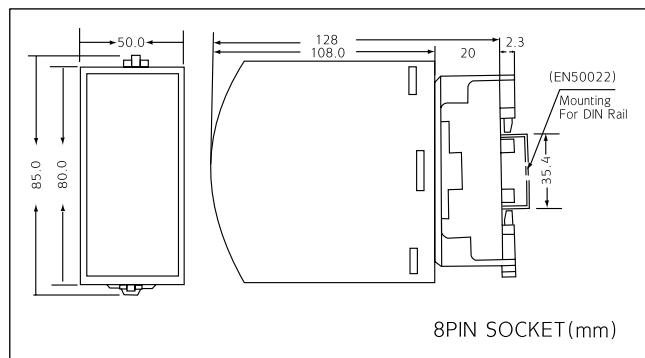
### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT LOSS	Less than 0.5VA	
OVER-INPUT	200% 1 minute	
OUTPUT	DC Current or DC Voltage Signal	
ACCURACY	$\pm 0.3\%$ Max.	
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$	
RESPONSE TIME	Less than 0.5Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V 1 Minute
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA DC 24V $\pm 10\%$ 110mA	
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F)	
HUMIDITY	Less than 90% RH ( no condensation )	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

### DIMENSION



### ORDERING CODE

MODEL : DPCT -   -

• INPUT SIGNAL

- 1. AC 0 ~ 1A
- 2. AC 0 ~ 5A
- 3. Other

• OUTPUT SIGNAL

- |                                      |                  |
|--------------------------------------|------------------|
| 1. 0~1mA DC                          | A. 0~10mV DC     |
| 2. 0~10mA DC                         | B. 0~100mV DC    |
| 3. 0~16mA DC                         | C. 0~IV DC       |
| 4. 0~20mA DC                         | D. 0~5V DC       |
| 5. 1~5mA DC                          | E. 0~10V DC      |
| 6. 2~10mA DC                         | F. 1~5V DC       |
| 7. 4~20mA DC                         | G. Other Voltage |
| 0. Other Current<br>(Less than 20mA) | (Less than 12V)  |

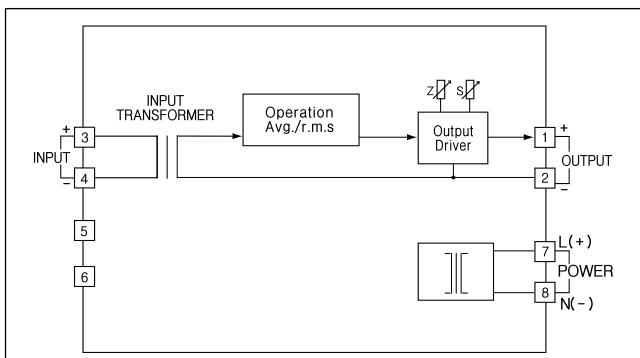
• POWER SUPPLY

- 1. AC 110V
- 2. AC 220V
- 3. DC 24V

• OPTION

- R. RMS Sensing

### BLOCK DIAGRAM



# General Specifications

## ANALOG TO PULSE CONVERTER

直流/PULSE 變換器



This instrument is a analog to pulse signal converter with isolated signal / output to convert DC current or DC voltage signals into pulse signals.

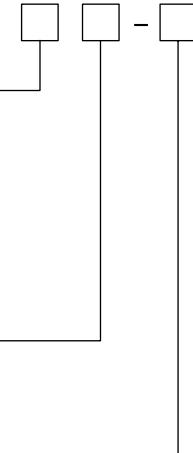
Input and Output power select separated each isolation circuit.  
In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS						
INPUT	DC Current or DC Voltage signal						
OUTPUT	Open Collector, Voltage Pulse						
OUTPUT RATING	DC24V 50mA Max						
OUTPUT FREQUENCY	Less than 1KHz						
ACCURACY	±0.2% Max.						
TEMP. COEFFICIENT	±0.02% / °C						
INSULATION RESISTANCE	Greater than 100MQ at DC 500V						
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> <td>1 Minute</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> <td></td> </tr> </table>	Input - Power	AC 1,500V	1 Minute	Input - Output	AC 1,500V	
Input - Power	AC 1,500V	1 Minute					
Input - Output	AC 1,500V						
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA						
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131°F )						
HUMIDITY	Less than 90% RH ( no condensation )						
CASE MATERIAL	ABS						
COLOR	Black						
WEIGHT	About 400g						
DIMENSION	W50 X H80 X D128mm						
MOUNTING	DIN RAIL						

### ORDERING CODE

MODEL : DPAP -



#### • INPUT SIGNAL

- 1. 0~1mA DC
- 2. 0~10mA DC
- 3. 0~16mA DC
- 4. 0~20mA DC
- 5. 1~5mA DC
- 6. 2~10mA DC
- 7. 4~20mA DC
- 0. Other Current

- A. 0~10mV DC
- B. 0~100mV DC
- C. 0~1V DC
- D. 0~5V DC
- E. 0~10V DC
- F. 1~5V DC
- Z. Other Voltage

#### • OUTPUT SIGNAL

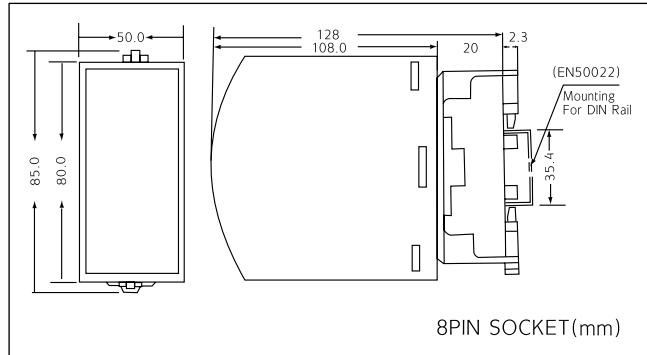
- 1. Open Collector
- 2. Voltage Pulse
- 3. Other

#### • POWER SUPPLY

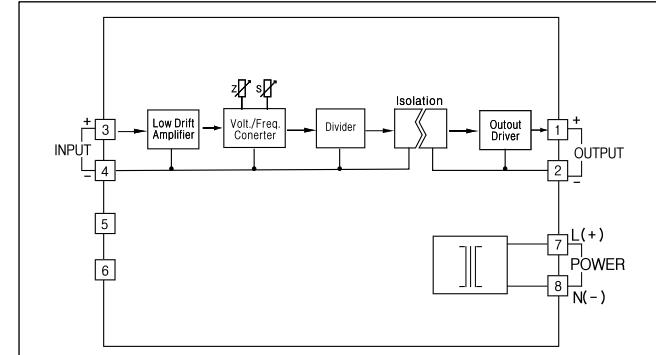
- 1. AC 110V    2. AC 220V

\* Please Specify the Input Range When you Order.

### DIMENSION



### BLOCK DIAGRAM



# General Specifications



## PULSE TO ANALOG CONVERTER

PULSE/直流 變換器

This instrument has a various pulse signals as an input then converts it into DC current and voltage signals to output.

Also it is a converter that an input, an output and a power are isolated electrically.

In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT	Dry Contact, Open Collector, Voltage pulse	
DETECTING CURRENT	30mA Max, DC12V	
OUTPUT	DC Current or DC Voltage Signal	
ACCURACY	$\pm 0.2\%$ Max,	
TEMP. COEFFICIENT	$\pm 0.02\% / ^\circ C$	
INSULATION RESISTANCE	Greater than 100M $\Omega$ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA	
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F )	
HUMIDITY	Less than 90% RH ( no condensation )	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

### ORDERING CODE

MODEL : DPPA -  -  -

• INPUT SIGNAL

- 1. Dry Contact (Max, 130pulse / 1min)
- 2. Open Collector (Max, Frequency 10KHz)
- 3. Voltage Pulse (Max, Frequency 10KHz)
- 4. Others

• OUTPUT SIGNAL

- |                                      |                  |
|--------------------------------------|------------------|
| 1. 0~1mA DC                          | A. 0~10mV DC     |
| 2. 0~10mA DC                         | B. 0~100mV DC    |
| 3. 0~16mA DC                         | C. 0~1V DC       |
| 4. 0~20mA DC                         | D. 0~5V DC       |
| 5. 1~5mA DC                          | E. 0~10V DC      |
| 6. 2~10mA DC                         | F. 1~5V DC       |
| 7. 4~20mA DC                         | Z. Other Voltage |
| 0. Other Current<br>(Less than 20mA) | (Less than 12V)  |

• POWER SUPPLY

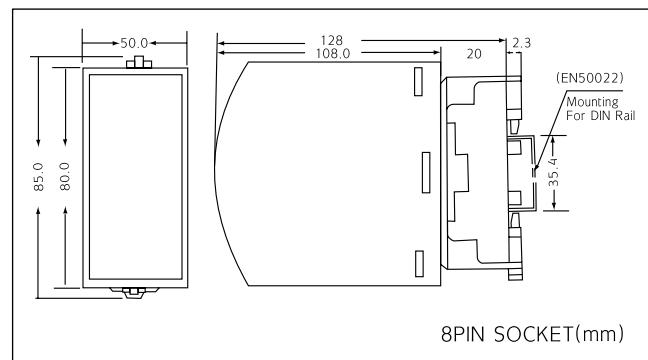
- 1. AC 110V    2. AC 220V

\* Please Specify the Input Range When you Order.

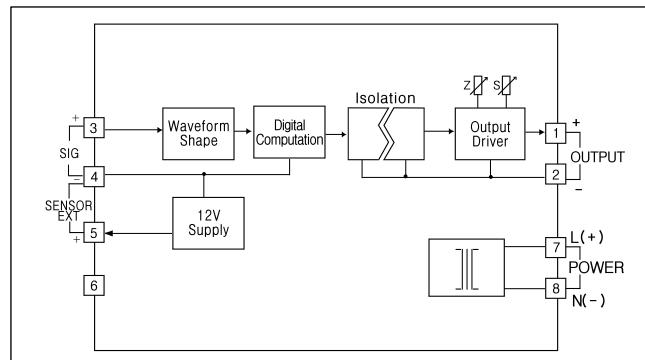
### ■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 600 $\Omega$
DC 1~5V	More than 2,5K $\Omega$
DC 0~10V	More than 5K $\Omega$

### DIMENSION



### BLOCK DIAGRAM



# General Specifications



## PULSE TO PULSE ISOLATOR

### PULSE/PULSE 絶縁変換器

This instrument has an input such as an opencollector or dry contact type of a flowmeter then eliminate a noise in a stable circuit.

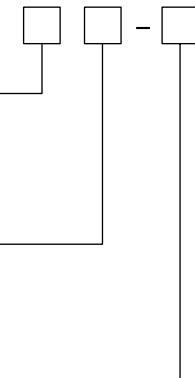
This high and accurate convert divides those kinds of signals. In the mounting method is PLUG-IN mounting.

## SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT	Dry Contact, Open Collector, Voltage pulse	
CONTACT DETECTING	DC 12V, 30mA Max	
OUTPUT	Relay Contact	Open Collector
OUTPUT RATING	AC 110V 1A	DC 24V 110mA
RESPONSE TIME	35ms	10ms
INPUT IMPEDANCE	More than 100KΩ	
ACCURACY	±0.5% Max.	
TEMP. COEFFICIENT	±0.02% / °C	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power Input - Output	AC 1,500V AC 1,500V
POWER SUPPLY	AC 110 / AC 220V ± 10%, 50/60Hz 3.5VA	
AMBIENT - TEMP	-5 ~ +55°C ( 23 ~ 131 °F)	
HUMIDITY	Less than 90% RH ( no condensation )	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 400g	
DIMENSION	W50 X H80 X D128mm	
MOUNTING	DIN RAIL	

## ORDERING CODE

MODEL : DPPI -



### • INPUT SIGNAL

- 1. Dry Contact (Max. 130pulse / 1Min)
- 2. Open Collector (Max. Frequency 10KHz)
- 3. Voltage Pulse (Max. Frequency 10KHz)

### • OUTPUT SIGNAL

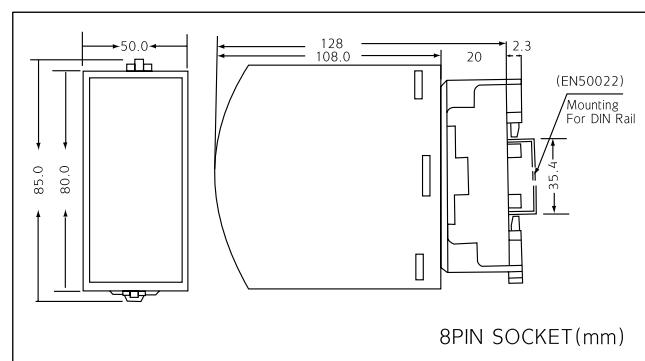
- 1. Relay Contact (Max. 130pulse / 1Min)
- 2. Open Collector (Max. Frequency 1KHz)
- 3. Voltage Pulse (Max. Frequency 1KHz)

### • POWER SUPPLY

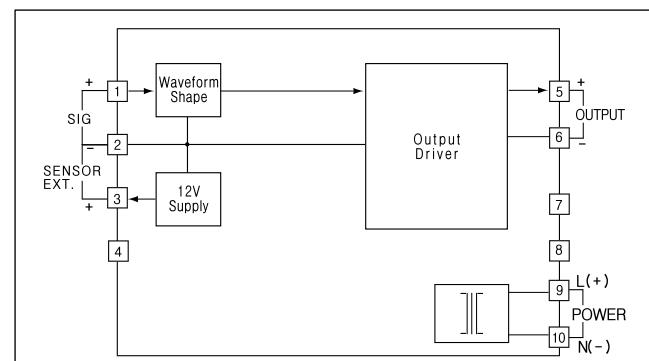
- 1. AC 110V    2. AC 220V

\* Please Specify the Input Range When you Order.

## DIMENSION



## BLOCK DIAGRAM



# General Specifications



## POWER DISTRIBUTOR

傳送器用 電源 (非絕緣)

This instrument is a high accurate converter which provides simultaneously power supply and signal conversion to all transmitter such as pressure transmitter, flow transmitter, level transmitter, etc and also contains over current and over voltage protection circuit inside.

In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS		
OUTPUT RATING SUPPLY TO X'TR	DC 24V 30mA Max, Ripple : less than 0.1Vp-p		
OUTPUT	DC Current or DC Voltage signal		
ACCURACY	$\pm 0.3\%$ Max.		
TEMP. COEFFICIENT	$\pm 0.02\%$ / $^{\circ}\text{C}$		
RESPONSE TIME	Less than 0.5Sec (0~90%)		
INSULATION RESISTANCE	Greater than 100M $\Omega$ at DC 500V		
DIELECTRIC - STRENGTH	Input - Power	AC 1,500V	1 Minute
	Output - Power	AC 1,500V	
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 3.5VA		
AMBIENT - TEMP	$-5 \sim +55^{\circ}\text{C}$ ( $23 \sim 131^{\circ}\text{F}$ )		
HUMIDITY	Less than 90% RH (no condensation)		
CASE MATERIAL	ABS		
COLOR	Black		
WEIGHT	About 400g		
DIMENSION	W50 X H80 X D128mm		
MOUNTING	DIN RAIL		

### ORDERING CODE

MODEL : DPPD -    -

- INPUT SIGNAL  
DC 4~20mA (2-Wire DC24V)

- CHANNEL  
1. 1Point

- OUTPUT RATING  
(X'TR SUPPLY)

- A. DC 24V use
- B. Other

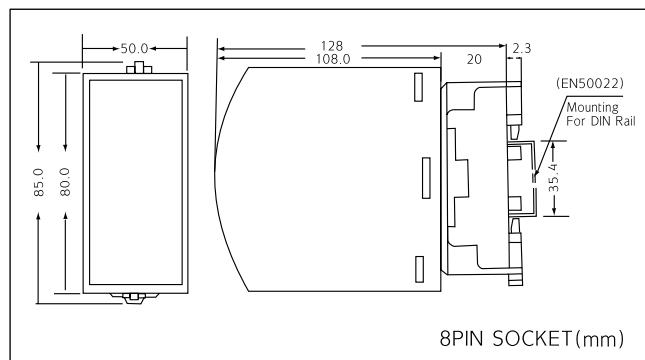
- OUTPUT SIGNAL

- F. 1~5V DC
- G. 4~20mA DC

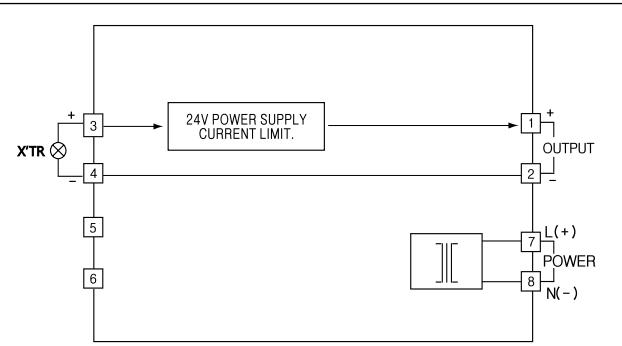
- POWER SUPPLY

- 1. AC 110V    2. AC 220V

### DIMENSION



### BLOCK DIAGRAM



# General Specifications

**POWER DISTRIBUTOR  
WITH SQUARE ROOT EXTRACTOR**  
傳送器用 電源(√)



This instrument is high and accurate converter that provides all transmitters such as a pressure transmitter, a flow transmitter and a level transmitter with power supply and signal conversion.

Also, It contains a protection circuit for over current and over voltage inside. It has a calculation function linear compensated the root scale of current output according to the flow characteristic.

In the mounting method is PLUG-IN mounting.

## *SPECIFICATIONS*

<i>ITEMS</i>	<i>DESCRIPTIONS</i>		
<i>OUTPUT RATING SUPPLY TO X' TR</i>	<i>DC 24V 30mA Max, Ripple : less than 0.1Vp-p</i>		
<i>INPUT SIGNAL</i>	<i>Square Root</i>		
<i>ACCURACY</i>	<i>± 0.3% Max,</i>		
<i>TEMP. COEFFICIENT</i>	<i>± 0.02% / °C</i>		
<i>RESPONSE TIME</i>	<i>Less than 0.5Sec (0~90%)</i>		
<i>INSULATION RESISTANCE</i>	<i>Greater than 100MΩ at DC 500V</i>		
<i>DIELECTRIC - STRENGTH</i>	<i>Input - Power</i>	<i>AC 1,500V</i>	<i>1 Minute</i>
	<i>Input - Output</i>	<i>AC 1,500V</i>	
<i>POWER SUPPLY</i>	<i>AC 110 / AC 220V ± 10%, 50/60Hz 4VA</i>		
<i>AMBIENT - TEMP</i>	<i>-5 ~ +55°C ( 23 ~ 131 °F )</i>		
<i>HUMIDITY</i>	<i>Less than 90% RH ( no condensation )</i>		
<i>CASE MATERIAL</i>	<i>ABS</i>		
<i>COLOR</i>	<i>Black</i>		
<i>WEIGHT</i>	<i>About 400g</i>		
<i>DIMENSION</i>	<i>W50 X H80 X D128mm</i>		
<i>MOUNTING</i>	<i>DIN RAIL</i>		

ORDERING CODE

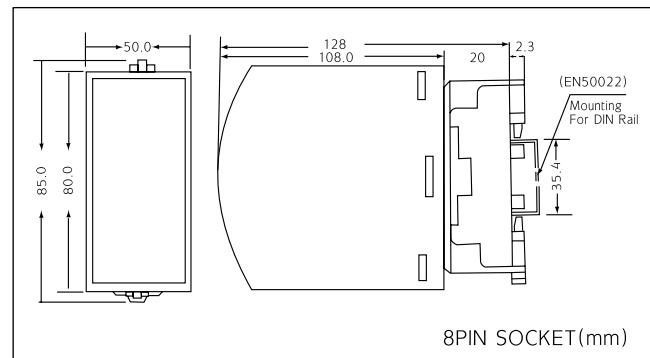
MODEL : DPPQ -

- **INPUT SIGNAL** \_\_\_\_\_  
DC 4~20mA (2-Wire DC24V)
  - **OUTPUT SIGNAL** \_\_\_\_\_  
F. 1~5V DC      7. 4~20mA DC  
Z. Other Voltage 0. Other Current  
(Less than 12V) (Less than 20mA)
  - **POWER SUPPLY** \_\_\_\_\_  
1 AC 110V    2 AC 220V

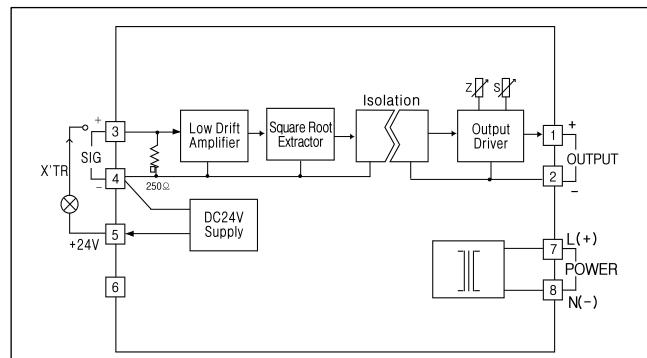
#### ■ *OUTPUT LOAD RESISTANCE*

<i>OUTPUT SIGNAL</i>	<i>LOAD RESISTANCE</i>
<i>DC 4~20mA</i>	<i>Less than 600Ω</i>
<i>DC 1~5V</i>	<i>More than 2.5KΩ</i>
<i>DC 0~10V</i>	<i>More than 5KΩ</i>

DIMENSION



## BLOCK DIAGRAM



# General Specifications

## ISOLATED LOOP POWER TRANSMITTER

2線式 信號變換器



CE

This is a high and accurate converter which provides all transmitters which power supply and signal conversion simultaneously. It is possible to design loop freely and synthetically using Isolator and Power Distributor of all instruments.

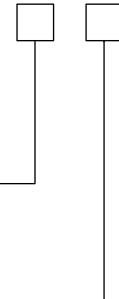
In the mounting method is PLUG-IN mounting.

### SPECIFICATIONS

ITEMS	DESCRIPTIONS				
OUTPUT RATING SUPPLY TO X' TR	DC 24V 30mA Max, Ripple : less than 0.1Vp-p				
ACCURACY	$\pm 0.2\%$ Max.				
TEMP. COEFFICIENT	$\pm 0.015\% / ^\circ C$				
RESPONSE TIME	Less than 0.5Sec (0~90%)				
INSULATION RESISTANCE	Greater than 100M $\Omega$ at DC 500V				
DIELECTRIC - STRENGTH	<table border="1"> <tr> <td>Input - Power</td> <td>AC 1,500V</td> </tr> <tr> <td>Input - Output</td> <td>AC 1,500V</td> </tr> </table> 1 Minute	Input - Power	AC 1,500V	Input - Output	AC 1,500V
Input - Power	AC 1,500V				
Input - Output	AC 1,500V				
POWER SUPPLY	AC 110 / AC 220V $\pm 10\%$ , 50/60Hz 4VA				
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131°F)				
HUMIDITY	Less than 90% RH (no condensation)				
CASE MATERIAL	ABS				
COLOR	Black				
WEIGHT	About 400g				
DIMENSION	W50 X H80 X D128mm				
MOUNTING	DIN RAIL				
OUTPUT LOAD RESISTANCE	0~1200 $\Omega$ (at 36V DC Supply) Supply V-12V / 0.02A				

### ORDERING CODE

MODEL : DPLP -



• INPUT SIGNAL

DC 4~20mA (2-Wire DC24V)

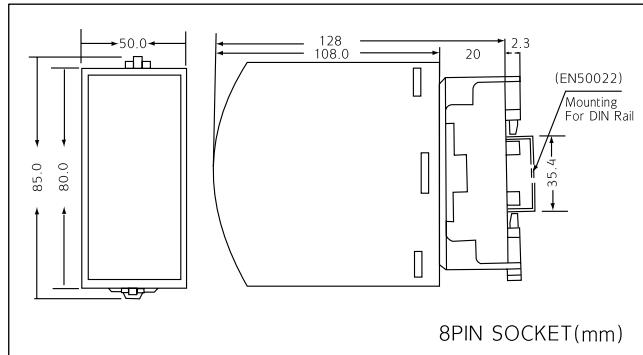
• OUTPUT SIGNAL

4~20mA DC  
Supply Voltage : DC 12V ~ 36V

• POWER SUPPLY

1. AC 110V 2. AC 220V

### DIMENSION



### BLOCK DIAGRAM

