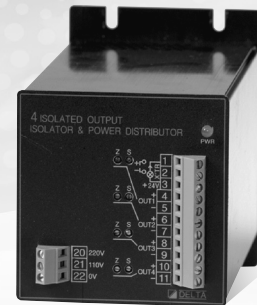


WALL MOUNTING TYPE CONVERTER (4OUTPUT)

DM - SERIES

■ FEATURE

- 4 Isolated output
- Actualization of high accuracy
- AC110V, AC220V Power supply



Contents

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General Specifications

4 ISOLATED OUTPUTS SIGNAL ISOLATOR & POWER DISTRIBUTOR 4出力 信號絶縁 變換器 & 傳送器用 電源



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

It is isolated between four outputs and contains overcurrent and overvoltage protection circuit inside.

It is especially advantageous to use both isolator and power distributor that changes wiring jumper.

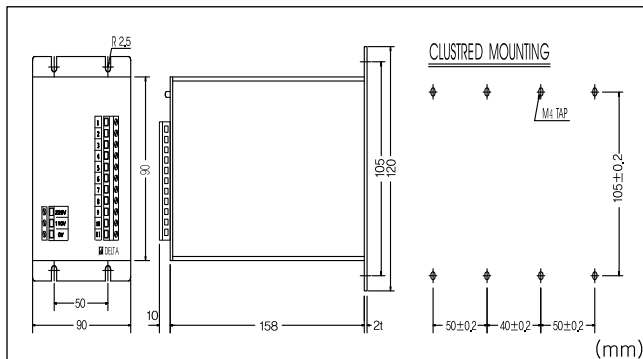
SPECIFICATIONS

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	±0.1% Max.
TEMP. COEFFICIENT	±0.015% / °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 - Output1, 2, 3, 4 AC 1,500V
	Output1 - Output2,3,4 AC 1,500V
POWER SUPPLY	AC 110 / 220V ± 10%, 50~60Hz, 10VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condenstation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

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

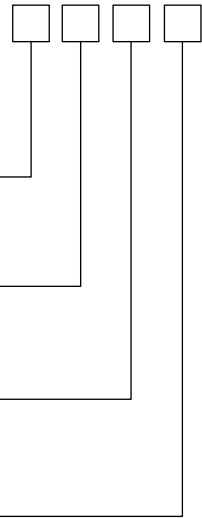
DIMENSION



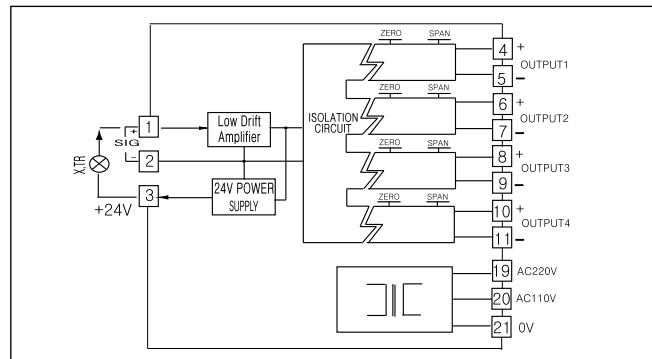
ORDERING CODE

MODEL : DMIP -

- INPUT SIGNAL
4~20mA DC (2-Wire DC24V)
- OUTPUT1 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT2 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT3 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT4 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- POWER SUPPLY
1. AC 110V / 220V



BLOCK DIAGRAM



General Specifications

4 ISOLATED OUTPUT R.T.D CONVERTER 4出力 測溫抵抗體 變換器



This instrument is a high and accurate converter that has RTD as an input signal and converts variation of resistance according to the temperature into DC output signal.

Also the feed back circuit developed by our company actualized linearization and compensation of line resistance. Especially an input and an output are totally separated.

It is isolated between four outputs so it is advantageous when a loop is constructed.

SPECIFICATIONS

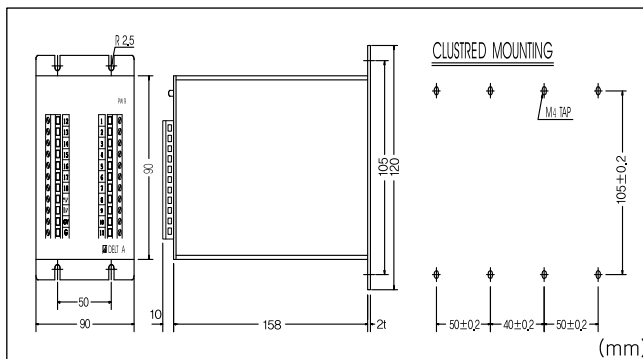
ITEMS	DESCRIPTIONS
INPUT	Pt 100Ω 3-Wire (Over 50deg) Adjustment needed for 2wire Bulb Permissible resistance of cable less than 10Ω
SUPPLY CURRENT TO Pt BULB	DC 2mA
BURN - OUT	Up scale
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.02% / °C
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1, 2, 3, 4 AC 1,500V
	Output1 - Output2,3,4 AC 1,500V
	1 Minute
POWER SUPPLY	AC 110 / 220V ± 10%, 50~60Hz, 10VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

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 : DMRB - [] [] [] [] []

INPUT SIGNAL

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

OUTPUT1 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT2 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT3 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT4 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

POWER SUPPLY

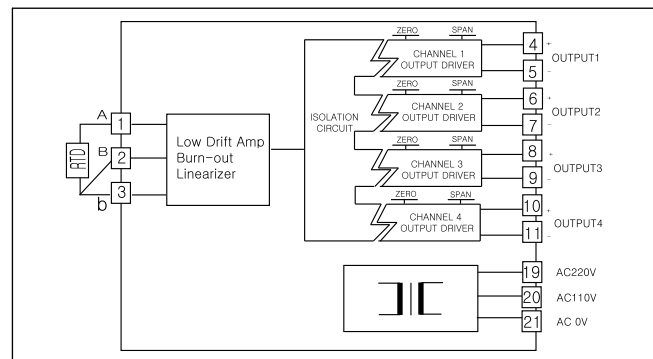
1. AC 110V / 220V

* 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

4 ISOLATED OUTPUTS THERMOCOUPLE CONVERTER 4出力 熱電對 變換器



This instrument is a high accurate converter that has various T/C as an input, then converts it into DC signal through temperature compensation and linear circuit as receiving a signal corresponding to temperature.

Especially an input and an output are separated completely and it is isolated between four outputs.

SPECIFICATIONS

ITEMS	DESCRIPTIONS		
INPUT	Thermocouple (K, J, T, R)		
BURN OUT	Up scale		
OUTPUT	DC Current or DC Voltage signal		
INPUT RESISTANCE	More than 1M Ω		
ACCURACY	$\pm 0.5\%$ Max.		
TEMP. COEFFICIENT	$\pm 0.02\%$ / $^{\circ}\text{C}$		
RESPONSE TIME	Less than 0.5Sec (0~90%)		
INSULATION RESISTANCE	Greater than 100M Ω at DC 500V		
DIELECTRIC - STRENGTH	Input - Power	AC 1,500V	1 Minute
	Input - Output1, 2, 3, 4	AC 1,500V	
	Output1 - Output2,3,4	AC 1,500V	
POWER SUPPLY	AC 110 / 220V $\pm 10\%$, 50~60Hz, 10VA		
AMBIENT - TEMP	-5 ~ +55 $^{\circ}\text{C}$ (23 ~ 131 $^{\circ}\text{F}$)		
HUMIDITY	Less than 90% RH (no condensation)		
CASE MATERIAL	AL		
COLOR	Black		
WEIGHT	About 1.2Kg		
DIMENSION	W90 X H90 X D170mm		
MOUNTING	WALL		

ORDERING CODE

MODEL : DMTC -

INPUT SIGNAL

1. K(CA)
2. J(IC)
3. T(CC)
4. R

OUTPUT1 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT2 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT3 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

OUTPUT4 SIGNAL

7. 4~20mA DC
- F. 1~5V DC
- G. Other

POWER SUPPLY

1. AC 110V / 220V

* Please Specify the Input Range When you Order.

STANDARD INPUT RANGE

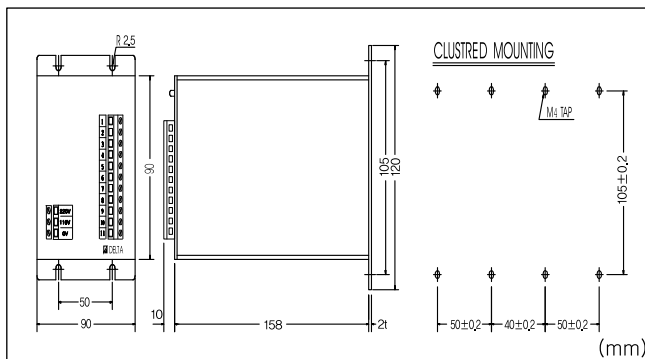
(UNIT : $^{\circ}\text{C}$)

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

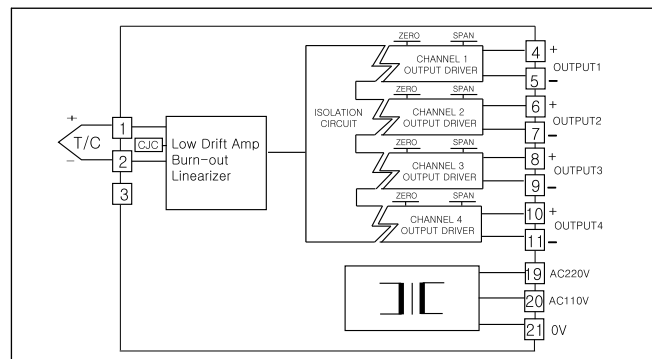
OUTPUT LOAD RESISTANCE

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

DIMENSION



BLOCK DIAGRAM



General Specifications

4 ISOLATED OUTPUTS POTENTIOMETER CONVERTER 4出力 可變抵抗 變換器



This instrument is a high and accurate converter that has resistance signal of 3 lines potentiometer ($100\Omega \sim 100k\Omega$) as an input, then converts it into DC signals, it is widely used for float type water level detector etc, and has hardly mutual interference of zero and span.

Especially an input and an output are separated completely and it is isolated between four outputs.

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	$\pm 0.015\%$ / $^{\circ}\text{C}$
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than $100M\Omega$ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1, 2, 3, 4 AC 1,500V
	Output1 - Output2,3,4 AC 1,500V
POWER SUPPLY	AC 110 / 220V $\pm 10\%$, 50~60Hz, 10VA
AMBIENT - TEMP	$-5 \sim +55^{\circ}\text{C}$ ($23 \sim 131^{\circ}\text{F}$)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

ORDERING CODE

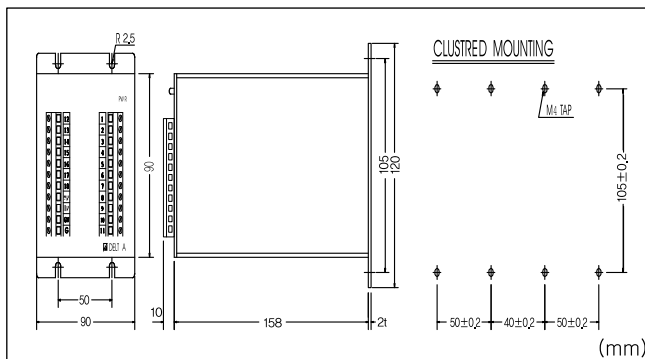
MODEL : DMPC -

- INPUT SIGNAL
POTENTIOMETER
(Total resistance $100\Omega \sim 100k\Omega$)
- OUTPUT1 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT2 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT3 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- OUTPUT4 SIGNAL
7. 4~20mA DC F. 1~5V DC
G. Other
- POWER SUPPLY
1. AC 110V / 220V
* Please Specify the Input Range When you Order.

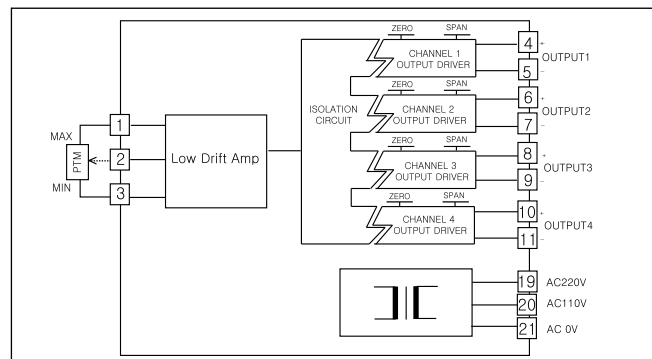
OUTPUT LOAD RESISTANCE

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

DIMENSION



BLOCK DIAGRAM



General Specifications

4 ISOLATED OUTPUTS SIGNAL ISOLATOR

4出力 信號絶縁 變換器



This instrument has DC voltage and current as an input signal, then converts and outputs it under the condition that input and output are separated completely.

It especially selects 3ways isolation circuit of which input and output are separated by photo coupler and power and input / output by transformer.

It is high and accurate converter that is suitable to protect a pulse noise and high peak voltage demanded in a computer interface and field instruments.

It is especially advantageous to construct loop because outputs are isolated.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.1% Max.
TEMP. COEFFICIENT	±0.015% / °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 - Output1, 2, 3, 4 AC 1,500V
	Output1 - Output2,3,4 AC 1,500V
POWER SUPPLY	AC 110 / 220V ± 10%, 50~60Hz, 10VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condenstation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

ORDERING CODE

MODEL : DMSI -

• INPUT SIGNAL
 7. 4~20mA DC F. 1~5V DC
 G. Other

• OUTPUT1 SIGNAL
 7. 4~20mA DC F. 1~5V DC
 G. Other

• OUTPUT2 SIGNAL
 7. 4~20mA DC F. 1~5V DC
 G. Other

• OUTPUT3 SIGNAL
 7. 4~20mA DC F. 1~5V DC
 G. Other

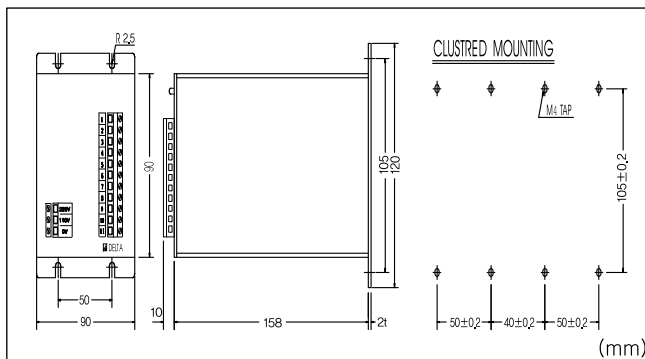
• OUTPUT4 SIGNAL
 7. 4~20mA DC F. 1~5V DC
 G. Other

• POWER SUPPLY
 1. AC 110V / 220V

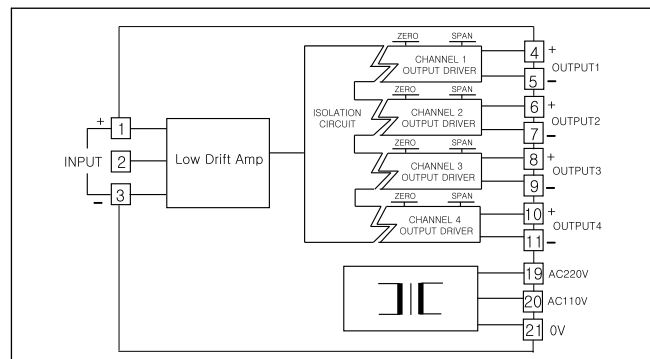
OUTPUT LOAD RESISTANCE

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

4 ISOLATED OUTPUT REVERSE CONVERTER

4出力 逆信號 變換器



This instrument is a high and accurate converter that has DC voltage and current as an input signal then converts them into reverse signal. It is possible to design loop freely and synthetically using input and output of all instruments.

It is possible to construct the loop freely by combination on input side of all instruments.

Especially an input and an output are separated completely and it is isolated between four outputs.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.1% Max.
TEMP. COEFFICIENT	±0.015% / °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 - Output1, 2, 3, 4 AC 1,500V
	Output1 - Output2,3,4 AC 1,500V
POWER SUPPLY	AC 110 / 220V ± 10%, 50~60Hz, 10VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condenstation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

ORDERING CODE

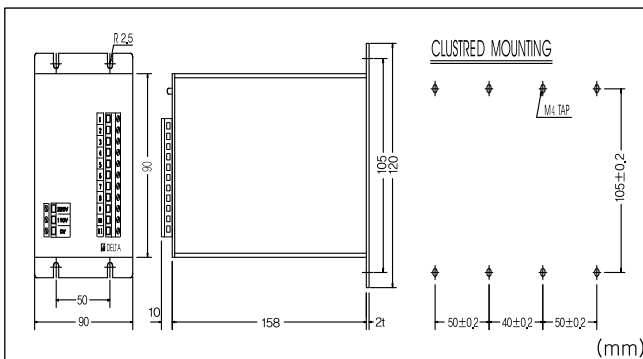
MODEL : DMRC - [] [] [] [] []

- INPUT SIGNAL
 - F. 4~20mA DC
 - F. 1~5V DC
 - G. Other
- OUTPUT1 SIGNAL
 - F. 20~4mA DC
 - F. 5~1V DC
 - G. Other
- OUTPUT2 SIGNAL
 - F. 20~4mA DC
 - F. 5~1V DC
 - G. Other
- OUTPUT3 SIGNAL
 - F. 20~4mA DC
 - F. 5~1V DC
 - G. Other
- OUTPUT4 SIGNAL
 - F. 20~4mA DC
 - F. 5~1V DC
 - G. Other
- POWER SUPPLY
 - 1. AC 110V / 220V

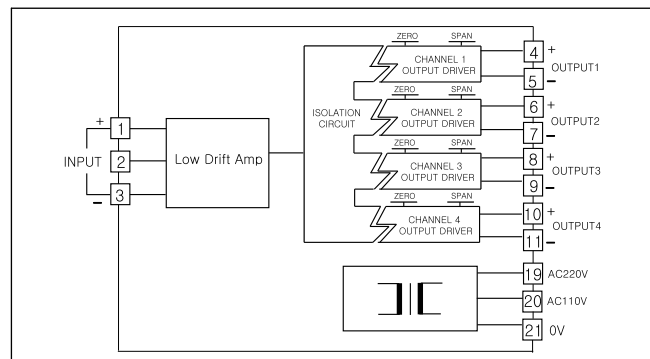
OUTPUT LOAD RESISTANCE

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

4 CHANNEL POWER DISTRIBUTOR

4CH 傳送器用 電源



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

You can use maximum four transmitters according to using places. It contains protection circuit for overcurrent and overvoltage.

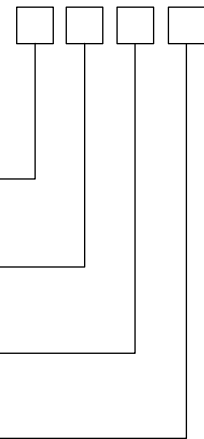
SPECIFICATIONS

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	±0.5% Max,
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.5Sec (0~90%)
ISOLATION	Input - Output Non Isolation
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V 1 Minute
POWER SUPPLY	AC 110 / 220V ± 10%, 50~60Hz, 10VA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	AL
COLOR	Black
WEIGHT	About 1.2Kg
DIMENSION	W90 X H90 X D170mm
MOUNTING	WALL

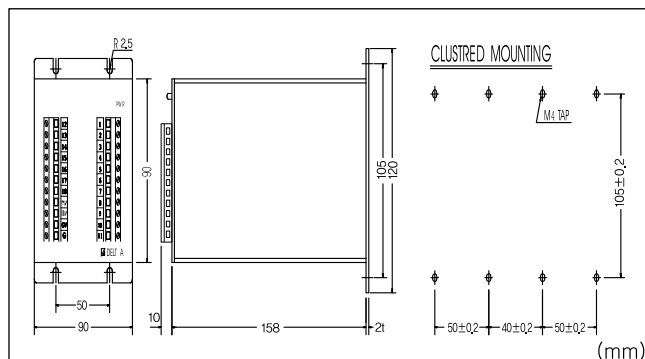
ORDERING CODE

MODEL : DMPD -

- INPUT SIGNAL
4~20mA DC (2-Wire DC24V)
- 1CH OUTPUT1 SIGNAL
7. 4~20mA DC F. 1~5V DC
- 2CH OUTPUT2 SIGNAL
7. 4~20mA DC F. 1~5V DC
- 3CH OUTPUT3 SIGNAL
7. 4~20mA DC F. 1~5V DC
- 4CH OUTPUT4 SIGNAL
7. 4~20mA DC F. 1~5V DC
- POWER SUPPLY
1. AC 110V / 220V



DIMENSION



BLOCK DIAGRAM

