

HD SIGNAL CONDITIONER SERIES

ISOLATED SIGNAL TRANSMITTER

MODEL HD-ISO

MODEL & SUFFIX CODE SELECTION

MODEL HD-ISO

Input signal

1	0-10mVDC	A	4-20mA DC
2	0-100mVDC	B	1-5mA DC
3	0-1VDC	C	0-20mA DC
4	0-10VDC	D	0-1mA DC
5	0-5VDC	E	Spec Order
6	1-5VDC		

Output1 signal

1	0-10mVDC	A	4-20mA DC
2	0-100mVDC	B	1-5mA DC
3	0-1VDC	C	0-20mA DC
4	0-10VDC	D	0-1mA DC
5	0-5VDC	E	Spec Order
6	1-5VDC		

Output2 signal

Availability as Output 1
N:None

Display

A:Percent
B:Input signal
C:Output signal
O:Others
N:None

Power

X:110V AC Y:220V AC
Z:24V DC O:Others


GENERAL SPECIFICATIONS

Construction : plug-in

Connection : M3.5 screw terminals

Housing material : flame-resistant resin (black)

Isolation : input to output to Signal

LCD meter : indicating input; 0.1% increments

Over range output : approx. -10 ~ +120%

Front adjustments : zero and span ; ±5%

INPUT & OUTPUT

DC Current : shunt resistor attached to input terminals (0.5W)

Input resistance : For resistance values other than listed below, specify when ordering.

Input	Input Resistance
4 - 20mA	: 250 (Ω) (100 Ω for orders)
2 - 10mA	: 500
1 - 5mA	: 1000
0 - 20mA	: 50
0 - 16mA	: 62.5
0 - 10mA	: 100
0 - 1mA	: 1000
10 - 50mA	: 100
0 - 10μA	: 1000
0 - 100μA	: 1000
-1 ~ +1mA	: 1000
-10 ~ +10mA	: 100

ORDERING INFORMATION

Specify code number and variables.

Code number : ex) HD-ISO-AAANY

Special input and output ranges : code:0

A : -10 ~ 20mA
V : 0 ~ ±15V

• DC Voltage : -300 ~ +300V DC****

Minimum span : 3mV

Zero suppression/elevation : max. 1.5 times span

Input resistance

Input Span	Input Resistance
3 ~ 10mV	: 10k (Ω minimum)
10 ~ 100mV	: 10k
0.1 ~ 1V	: 100k
$\geq 1V$	: 1M

■ OUTPUT

• DC Current : 0~20mA DC

Minimum span : 1mA

Zero suppression/elevation : max. 1.5 times span

Load resistance : output drive 15V maximum

Output	Load Resistance
4 ~ 20mA	: 750 (Ω maximum)
2 ~ 10mA	: 1500
1 ~ 5mA	: 3000
0 ~ 20mA	: 750
0 ~ 16mA	: 900
0 ~ 10mA	: 1500
0 ~ 1mA	: 15k

• DC Voltage : -10 ~ +12V DC

Minimum span : 5mA

Zero suppression/elevation : max. 1.5 times span

Load resistance : output drive 10mA maximum;

Output	Load Resistance
0 ~ 10mV	: 10k (Ω minimum)
0 ~ 100mV	: 100k
0 ~ 1V	: 100
0 ~ 10V	: 1000
0 ~ 5V	: 500
1 ~ 5V	: 500
-10 ~ +10V	: 2000
-5 ~ +5V	: 1000

INSTALLATION

Power input

AC : rating $\pm 10\%$, 50/60 ± 2 Hz, approx. 2VA

DC : rating $\pm 10\%$ (ripple 10% p-p max.)
approx. 2W

Operating temperature : -5 to +55°C (23 to 131°F)

Operating humidity : 30 to 90% RH (non-condensing)

Mounting : surface or DIN rail

Dimensions : W50 × H80 × D123 mm

See General Spec. Sheet Page B-1.

Terminal assignment : See General Spec. Sheet Page B-1.

PERFORMANCE in percentage of span

Accuracy : $\pm 0.1\%$

Temp. coefficient : $\pm 0.02\%/^{\circ}\text{C}$ ($\pm 0.01\%/^{\circ}\text{F}$)

Ripple : 0.25% p-p max. (100/120Hz)

Input measured Anniversary : 100ms

Line voltage effect : $\pm 0.1\%$ over voltage range

Insulation resistance : $\geq 100\text{M}\Omega$ with 500V AC

(Power Input/Output an insulator)

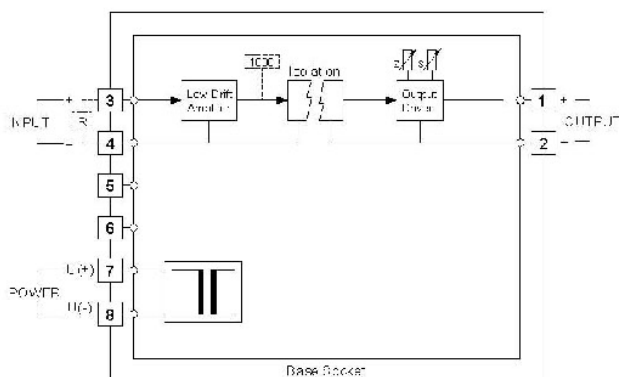
Dielectric strength : 1500V AC @1 minute

(Input to output to power to ground)

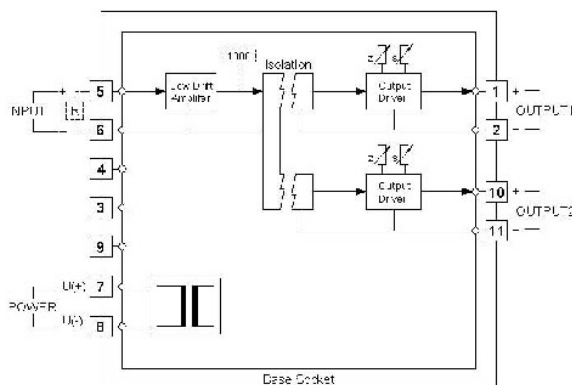
Surge withstand Voltage : 1.2/50 μsec , $\pm 5\text{KV}$

(Input to output to power to ground)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Input shunt resistor attached for current input



* Input shunt resistor attached for current input