

HD SIGNAL CONDITIONER SERIES

PT TRANSMITTER

MODEL
HD-PT

MODEL & SUFFIX CODE SELECTION

MODEL HD-PT

■ Input signal

1	0 – 150V AC
2	0 – 300V AC
3	0 – 500V AC
O	Spec Order

■ Output1 signal

1	0–10mVDC	A	4–20mADC
2	0–100mVDC	B	1–5mADC
3	0–1VDC	C	0–20mADC
4	0–10VDC	D	0–1mADC
5	0–5VDC	O	Spec Order
6	1–5VDC		

■ Output2 signal

Availability as Output1
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



INPUT & OUTPUT

■ INPUT

0 – 150V AC , 0 – 300V AC

Frequency : 50 or 60 Hz

Input burden : 1VA maximum

Overload capacity : 200% of rating for 1 minute,
120% continuous

Operational range : 0 – 120% of rating

■ 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 – +12VDC

Minimum span : 5mV

Zero suppression/elevation : max. 1.5 times span

Load resistance : output drive 10mA maximum;

5mA for negative voltage output; at $\geq 0.5V$

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

ORDERING INFORMATION

Specify code number and variables.

•Code number : HD-PT-1AANY

•Special input and output ranges : code:0

A : –10 ~ 20mA

V : 0 ~ $\pm 15V$

GENERAL SPECIFICATIONS

Construction : plug-in

Connection : M3.5 screw terminals

Housing material : flame-resistant resin (black)

Isolation : input to output to power

Input waveform : up to 15% of 3rd harmonic content

LCD meter : indicating input; 0.1% increments

Overrange output : 0 – +120% at 1 – 5V

Front adjustments : zero and span ; $\pm 5\%$

INSTALLATION

Power input

- AC** : rating $\pm 10\%$, 50/60 ± 2 Hz, approx. 2VA
DC : rating $\pm 10\%$, or 85 – 150V for 110V rating
 (ripple 10% p-p max.)
 approx. 2W (80mA at 24V)

Operating temperature : -5 to +60°C (23 to 140°F)

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

Mounting : surface or DIN rail

Dimensions : W50 x H80 x D132 mm

See General Spec. Sheet Page B-1.

Weight :

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

PERFORMANCE in percentage of span

Accuracy : $\pm 0.1\%$

Temp. coefficient : $\pm 0.015\%/^{\circ}\text{C}$ ($\pm 0.008\%/^{\circ}\text{F}$)

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

Response time : $\leq 0.4(400\text{ms})$ seconds (0 – 90%)

Ripple : 0.5% p-p max.

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

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

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 GROUND)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

