

PI-D Programmable Isolating DC Transmitter.

Programmable Isolating DC Voltage or
DC Current Input to DC Current or
DC Voltage Output Transmitter.

Features.

- Field Programmable Input and Output Ranges.
- Bi-Polar Input and Output Ranges.
- Input to Output Isolation 1.6kV.
- High Accuracy 0.1%.
- Universal AC\DC Power Supply.
- Transmitter Power Supply Standard.
- Compact DIN Rail Mount Enclosure.
- Available Standard or Special Calibration.



Other PI- models include:
PI-B Bridge \ Strain gauge;
PI-F Frequency;
PI-K Resistance;
PI-M Maths Computing;
PI-N RTD Differential Pt100;
PI-P Potentiometer;
PI-R RTD Pt100;
PI-S Dual Setpoint Controller;
PI-T Thermocouple.

Ordering Information.

PI-D-X Standard Calibration: Input 4~20mA; Output 4~20mA;
Standard Universal Power Supply.

PI-D - ☐ - ☐ - ☐ - Special Range Special Range Calibration.
IR OR PS

INPUT RANGES				OUTPUT RANGES			
Voltage	IR	Current	IR	Voltage	OR	Current	OR
0~10mV	A	0~200µA	1	0~500mV	A	0~1mA	1
0~20mV	B	0~500µA	2	0~1V	B	0~2mA	2
0~50mV	C	0~1mA	3	0~2V	C	0~5mA	3
0~100mV	D	0~2mA	4	0~3V	D	0~10mA	4
0~200mV	E	0~5mA	5	0~4V	E	0~16mA	5
0~500mV	F	0~10mA	6	0~5V	F	0~20mA	6
0~1V	G	0~20mA	7	0~6V	G	1~5mA	7
0~2V	H	0~50mA	8	0~8V	H	2~10mA	8
0~4V	I	0~100mA	9	0~10V	I	4~20mA	9
0~5V	J	1~5mA	10	0~12V	J	-1~1mA	10
0~10V	K	2~10mA	11	1~5V	K	-2~2mA	11
0~20V	L	4~20mA	12	2~10V	L	-5~5mA	12
0~50V	M	10~50mA	13	-1~1V	M	-10~10mA	13
0~100V	N	-1~1mA	14	-2~2V	N	-20~20mA	14
0~150V	O	-10~10mA	15	-5~5V	O		
1~2V	P	-20~20mA	16	-10~10V	P		
1~5V	Q	20~4mA *	17	-12~12V	Q		
2~10V	R	50~10mA *	18				
-1~1V	S						
-5~5V	T						
-10~10V	U						
Special Input Range			Z	Special Output Range			Z

Ranges with '*' beside them must have the polarity of their connections reversed.

POWER SUPPLY		PS
Standard Universal Power Supply: 24~270VAC and 20~380VDC		S
Low Voltage Power Supply: 8~30VAC and 8~30VDC		L

Ordering Examples.

- 1/ PI-D-K-1-L 0~10V Input; 0~1mA Output; Low Voltage Universal Power Supply.
2/ PI-D-Z-P-S-0/8V 0~8V Input; -10~10V Output; Standard Universal Power Supply.

Quality Assurance Programme.

The modern technology and strict procedures of the ISO9001 Quality Assurance Programme applied during design, development, production and final inspection grant long term reliability of the instrument.



PI-D Specifications.

Input	-Voltage	Field Programmable From 10mV to 150Vdc and Bipolar. Minimum Input Resistance = 200k Ω .
	- Current	Maximum Over-range = 10Vdc Continuous. Field Programmable From 200 μ A to 100mA and Bipolar. Input Resistance = 25 Ω .
	-Transmitter P\I S	Maximum Over-range = 120mA Continuous. 20Vdc $\pm$ 5% Common to Input Com. (Terminal 4.) Max Load = 30mA.
		Ripple < 20mVpp Typical at 30mA Load.
Output	-Voltage	Field Programmable From 500mV to $\pm$ 12Vdc. Maximum Output Drive = 10mA.
	-Current	Field Programmable From 1mA to $\pm$ 20mA. Maximum Output Drive = 10Vdc. (500 Ω @ 20mA.)
Universal P\I S	-Standard	20~380Vdc and 24~270Vac; 50/60Hz; 4VA (32Vac Min. if Tx. P\I S used.)
	-Low Voltage	8~30Vdc and 8~30Vac; 50/60Hz; 4VA.
	-Circuit Sensitivity	< $\pm$ 0.001%/V FSO Typical.
Accurate to		< $\pm$ 0.1% FSO Typical.
Linearity & Repeatability		< $\pm$ 0.1% FSO Typical.
Ambient Drift		< $\pm$ 0.01%/C FSO Typical.
Noise Immunity		125dB CMRR Average. (1.6kVac RMS Limit.)
R.F. Immunity		<1% Effect FSO Typical.
Isolation Voltage		1600Vac/dc Input to Output for 60sec.
Response Time		200msec Typical. (From 10 to 90% 50msec Typical.)
Operating Temperature		0~50C.
Storage Temperature		-20~80C.
Operating Humidity		90%RH max. Non-Condensing.
Construction		Socket Plug-In Type with Barrier Terminals.

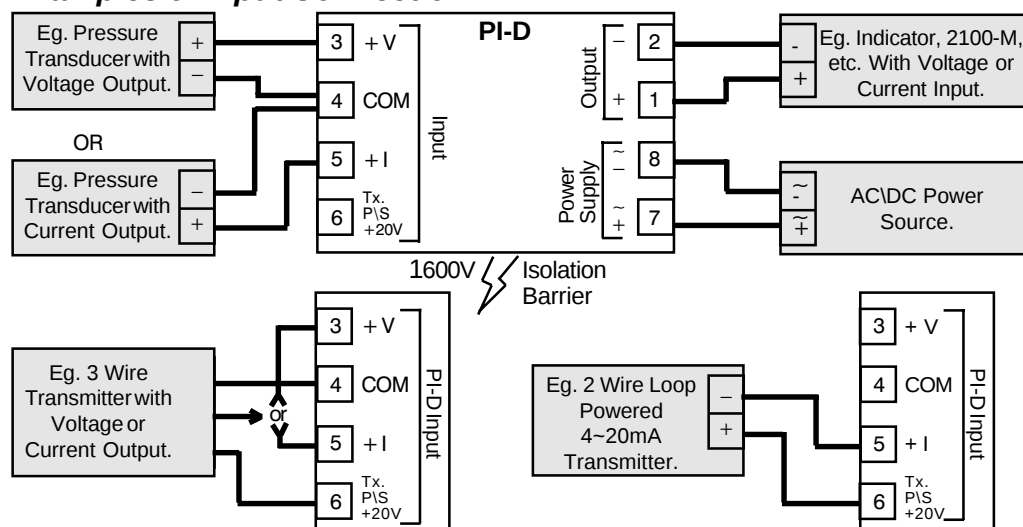
Note 1. Specifications based on Standard Calibration Unit, unless otherwise specified.

Note 2. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification.

No liability will be accepted for errors, omissions or amendments to this specification.

Note 3. Further ranging and installation information supplied with each unit, and is available upon request.

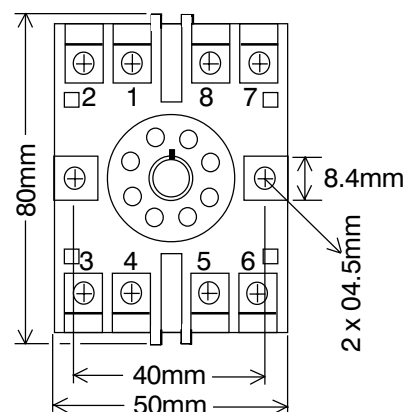
Examples of Input Connection.



Terminations.

Output	1	+Ve
	2	-Ve
Input	3	+ V
	4	COM
	5	+ I
	6	Tx. P\I S 20V
P\I S	7	-AC\+DC
	8	-AC\ -DC

Dimensions and Mounting.



8PFA Octal Termination Base

