

ADP15 Pressure Input Instrument



features

- Microprocessor based design
- Full calibration & program via keypad & comms import
- 4.5 digit high resolution
- Isolated inputs & outputs
- PID control
- Auto / Calibration module
- High noise immunity
- Accepts most pressure inputs
- DIL switch selectable gain options
- Peak Hold

outputs available

- ⇒ Analogue
- ⇒ Relays
- ⇒ Communications
- ⇒ Printer Drive
- ⇒ Pulse/Frequency
- ⇒ Control



options

- ⇒ Panel Mounting & Din Rail Mounting
- ⇒ Supplies for 110/240 VAC or 12/24 VDC
- ⇒ Communications Outputs for Printers, PLC or PC
- ⇒ Software Options:-Valve Control
- ⇒ Analogue Totaliser/Integrator

accessories

- ⇒ IF25 Interface Module Connects up to 25 ADP15's to one RS232 port
- ⇒ Printers DP data only and TDP for real time/date
- ⇒ REM 4/8- for multi-set point units up to 16 set points



ADP15 Pressure Input Instrument

specifications & order codes input details

Input Code	Range		Res	90 Day Accuracy (Typical) ± % of reading 0.08 ±0.05%FSD
	Min	Max		
PS	-0.5mV/V	200mV/V	0.0025%	

output details

D C Analogue Outputs

Code	RANGE		Code	RANGE	
	Min	Max		Min	Max
V1	0	1V	A1	0	1mA
V2	0	5V	A2	0	20mA
V3	1	5V	A3	4	20mA
V4	0	10V	A4	10	50mA
			A5	0	5mA

Max Current out 50mA Max Voltage out 20V

Accuracy: typical ± 0.08% of output, ± 0.08%FSD
 Resolution: as display resolution, max 15 bits
 Calibration: by 15-turn presets for gain and offset
 Inversion: by keypad code
 Isolation: 354VP to any other port
 Ranging: fully keypad scalable over desired display range
 PID: Power level, when selected = 12 bit resolution output

Frequency Output

Provides a varying frequency output from the displayed input variable.

Code	RANGE	
	Min	Max
F1 1	8.204 Hz	2352.9 Hz

Scaling: By keypad OPL Display point for minimum frequency
 OPH Display point for maximum frequency

With coarse adjustment from prescaler for divide by 1,2,4,8,16,32,64 or 128 selectable by internal DIL switches.
 Transistor switch output, 2V min to 20mV max. Isolation 354VP to any port.

Communication Port CP

Operation
 All ADP15 display data can be accessed via the communications port along with relay, PID power and EEPROM status.
 All ADP15 user configurable data can be changed including EEPROM enable/disable and relay reset. (ADP15 address code cannot be changed.)
 Connections: 4 wire for 2x2 20mA isolated transmit and receive loops
 Max cable lgth: 1 Km (depending on baud rate and can be used)
 Baud rates: 300, 600, 1200, 2400, 4800, 9600 (19200 S1 only)
 Electrical Isolation: ±130V RMS or DC max to analogue input or any other port
 Format: S1 High Speed, high data integrity using check sum and ACK/NAK handshaking
 S2 ASCII format for easy use
 RS232 to 20mA: Connection to RS232 via separate IF25 interface
 IF25 Interface which will support up to 25 ADP15's. Up to 10 IF25's can be directly wired together to support 250 ADP15's from one RS232 port.

Alarm/Control Outputs

Code	Type	Function	Code	Type	Function
R1	SPCO	1 relay on SP1	R5	DPCO	1 relay on SP2
R2	DPCO	1 relay on SP1	TR1	SPNO	1 Triac on SP1
R3	SPCO	2 relays on SP1&2	TR2S	PNO	2Triacs onSP1&2
R4	SPCO	1 relay on SP2			

Relays: 240V at 5A a. c. resistive. Isolation 354VP. Triacs: 240V at 2V a.c. resistive. Zero crossing. Isolation 354VP. Keypad programmable options: see configurable parameters for Hysteresis, Latching, Output Inversion, Delay Times, PID values and Time Proportioning.

Power Supplies

Code	Type
240	220V-240V A.C. 50-60Hz 10W
110	110V-120V A.C. 50-60Hz 10W
12/24	9-32V D.C. 10W isolated

Base ADP15

Input Filter Programmable to average up to 64 display updates.
 Display 7 segment LED 4.5 digit 10mm.
 3 x 3mm LED's 2 for relay status, 1 for programme and hold indication.
 Controls 4 membrane panel keys with tactile feedback. 1 scroll key to view/update parameter. 1 digit select key. 1 digit increment key. 1 reset key. Keypad disable by internal links behind front panel. Hold function by digit select key when in input mode.

Data Retention/Protection

Retention: 10 years for set up values, minimum of 10,000 write cycles.
 Protection of data and function(s): Watchdog timer giving repeat auto resets. Impending power detection and hold off. Keypad security and time out.

Environmental

Storage temperature	-20 to +70°C
Operating temperature	-10 to 50°C
Relative humidity	95% maximum non stop condensing
Front panel sealing	To IP65
Physical	
Case Dimensions:	DIN 72 x 72 x 163mm (excluding mounting terminal)
Case Material:	Grey Noryl, flame retardant
Weight:	750g
Terminals:	2.5mm, saddle field terminals
Accessibility:	All electronics removable through front panel leaving field wiring and case in situ.

In the interests of continued product development, we reserve the right to alter product specifications without prior notice.

Printer output RS232

The printer option utilises the communications board RS232 output.
 With the output drive for a printer offering a Time/Date stamp and log number together with the label of units of measure, or
 With the output drive for a log number only, together with label of units of measure. A wide range of printer may be connected.