Procter & Chester Measurements

ADP15

Versatile Indicator/Controller

Features

- Input Types for all Industry Standard Sensors
- High Resolution
- Very High Reliability
- Small Panel Space
- Easy Access to Electronics via front of panel
- Measurement in Any Engineering Units
- Full calibration & programming via keypad or comms import
- Peak hold
- Isolated inputs & outputs
- PID control
- Analogue outputs to all industry standards
- Relays – High current
- Printer Drive
- Pre calibrated inputs
- 10 year data protection
- 3 year guarantee
- DC power options
- Communications – RS232, RS485/422

Specifications

Inputs

Input type	Input ranges available
DC Voltage	+/-20mV, +/-200mV, +/-2V,+/-20V, +/-200V
DC Current	+/-2mA, 4-20mA, +/-20mA, +/-200mA
AC Voltage	0-200mV, 0-2V, 0-20V, 0-200V
AC Current	0-1A
Temperature	Platinum Pt100, Thermocouples K, J, R, S, T, B, N, E
Strain Gauge	Resistive bridge settable +/-0.5 to +/-200mV/V, Excitation 10Vdc
Potentiometer	Any value in the range 100R to 10K
LVDT	AC excitation with signal selectable 20mV to 10V full range
Pulse	Speed, rate or total, 30 to 200,000rpm, 0.3u Secs to 200 Secs.
Angle	Quadrature shaft encoder
Dual DC	2 inputs of 4-20mA or 0-10V allowing AxB, A-B, A+B, A/B, B=set point

DC Analogue Outputs

Order Code	Range	Order Code	Range
V1	0 to 1V	A1	0 to 1mA
V2	0 to 5V	A2	0 to 20mA
V3	1 to 5V	A3	4 to 20mA
V4	0 to 10V	A4	10 to 50mA
V6	-10 to +10V	A5	0 to 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 pre sets for gain and offset
Inversion, By keypad value
Isolation, ±130V RMS or DC max to analogue input or to any other port
Ranging, Fully keypad scalable over desired display range
PID, Power level, when selected = 12 bit resolution output

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).

Communications Port

Order Code	Type	Details
COM1	RS232	For printer or direct connection to 1 device, 3 wire
COM1	RS485/422	For up to 32 instruments on 1 bus, 4 wire
S1	20mA	For up to 25 instruments per interface, 4 wire

Baud rates, 300, 600, 1200, 2400, 4800, 9600 (19200 MANTRABUS only)
Electrical isolation, ±130V RMS or DC max to analogue input or any other port
Formats, MODBUS RTU, MANTRABUS and printer output formats

Specifications

Alarm/Control Outputs

Order Code	Type	Function
R1	SPCO	1 relay on SP1
R2	DPCO	1 relay on SP1
R3	SPCO	2 relays on SP1& 2
R4	SPCO	1 relay on SP2
R5	DPCO	1 relay on SP2

Relays, 230V at 5A AC resistive
Isolation, ±130V RMS
Keypad Programmable options: Hysteresis, Latching, Output Inversion, Delay Times, PID values and Time Proportioning.
16 relay option can be supplied on external DIN rail modules (10A SPCO). Available for DC, AC, Temperature, Strain Gauge & Potentiometer inputs, ask for ADP15-SP16

Power Supplies

Order Code	Type
240	220V-230V AC 50-60Hz 10W
110	110V-120V AC 50-60Hz 10W
12/24	9-32V DC 10W isolated

Base ADP15

Input Filter	Programmable to average up to 64 display updates.
Displays	7 segment LED 4.5 digit 10mm.3 x 3mm LED's 2 for relay status, 1 for program and hold indication.
Update Rate	Up to 10 updates per second

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 100,000 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.

CE & Environmental

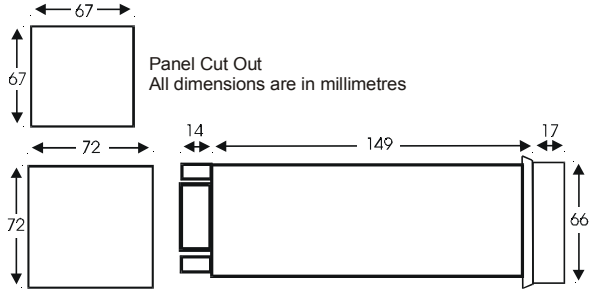
Storage temperature	-20 to +70ºC	EMC Emissions	BS EN 55011:1998
Operating temperature	-10 to 50ºC		
Relative humidity	95% maximum non condensing	EMC Immunity	BS EN 61000-42:1995
Safety/Low Voltage Directive	73/23/EEC amended by 93/68/EEC		BS EN 61000-4-3:2002
	BS EN 61010-1:2001, IEC 1010-1-1990		BS EN 61000-4-4:2004
EMC Directive	89/336/EEC		BS EN 61000-4-11:2004
	Basic Standard BS EN 61326:1998		

Other Options & Accessories

Panel Mounting or Din Rail Mounting
One pass calibration
20mA PC Communications Interface (IF25)
VisualLink PC SCADA Software
Analogue Totaliser (Integrator)

Physical

Case Dimensions	DIN 72 x 72 x 163mm (excluding mounting terminal)
Case Material	Grey Noryl, flame retardant
Weight	750 grams
Terminals	2.5mm, saddle field terminals
Accessibility	All electronics removable through front panel leaving field wiring and case in situ.



CE *In the interest of continued product development, Procter & Chester (Measurements) Ltd reserves the right to alter product specifications without prior notice.*