

Description

The ADP15 range of products is very versatile, accepting a wide range of different signal input types and ranges.

The ADP15 flexibility makes it the first choice for many control system designers. Supporting products like PC software, printers, and sensors, means most customers can deal with a single supplier.

Outputs include: - Analogue voltage and current, Industry standard digital communications, Relays, Printer Drive.

Options and Accessories include: -

- Panel mounting via DIN rail mounting
 - IF25 Interface module (connects up to 25 off ADP15's to one RS232 port)
 - Power supplies for 110/230VAC or 9-32VDC
 - Communications for Printer, PLC or PC
- Software Options: - Power Factor Printers
DP data only and TDP for real time/date.

The ADP15 can be supplied as part of a system, including many of the wide range of LCM Systems sensors and instrumentation. Please contact our technical department to discuss your application.

Typical Applications

- Remote display of process variables
- PID control for pressure/load controlled systems
- Crane load monitoring and protection
- Can be used with any load cell or pressure transducer from LCM Systems, with built in amplifier

ADP15 AC/DC Voltage and Current Indicator



Features

- Microprocessor based design
- Full calibration & programming via keypad & communications import
- Isolated inputs & outputs range AC & DC powering
- 3 year guarantee
- PID Control
- Isolated Analogue Outputs
- Fail safe alarm/relay outputs
- 4½ digit high resolution
- AC Voltage 0 to 200V
- AC Current 0 to 1Amp
- DC Voltages 20mV to 200V
- DC Current 2mV to 200mA
- Peak hold

AC & DC Voltage and Current Indicator

Specification

Input Type	Input Ranges	Order code
DC Voltage	+/-20mV	DCV1
	+/-200mV	DCV2
	+/-2V	DCV3
	+/-20V	DCV4
	+/-200V	DCV5
DC Current	+/-2mA	DCA1
	4-20mA (3.5mA to 20.5mA)	DCA2E
	+/-20mA	DCA3
	+/-200mA	DCA4
AC Voltage	0-200mV	ACV1
	0-2V	ACV2
	0-20V	ACV3
	0-200V	ACV4
AC Current	0-1A	ACA

Outputs	Details	Order code
0 to 1V		V1
0 to 5V		V2
1 to 5V		V3
0 to 10V		V4
±10V		V5
0-1mA		A1
0-20mA		A2
4-20mA		A3
10-50mA		A4
0-5mA		A5
0-10mA		A6

Other Information

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

Communications Port	Details	Order code
RS485/232	RS485 - For up to 32 instruments on 1 bus, 4 wire	COM 1
	RS232 – printer or direct connection to 1 device, 3 wire	
20mA current loop	For up to 25 instruments per interface, 4 wire	S1

Other Information

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

Alarm/Control Outputs	Details	Order code
SPCO	1 relay on SP1	R1
DPCO	1 relay on SP1	R2
SPCO	2 relays on SP1& 2	R3
SPCO	1 relay on SP2	R4
DPCO	1 relay on SP2	R5

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Other Information

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

Power Supplies	Details	Order code
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240	220V-230V AC 50-60Hz 10W	240
110	110V-120V AC 50-60Hz 10W	110
12 & 24V	9-32V DC 10W isolated	12/24

Mounting Type	Order code
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Front Panel	P
Din Rail Adaptor	D

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).

Other Options & Accessories

One pass calibration
20mA PC Communications Interface (IF25)
VisualLink PC SCADA Software
Analogue Totaliser (Integrator)

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 seconds

Controls

4 membrane panel keys	Scroll key to view/update parameter.
	Digit select key.
	Digit increment key.
	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 cycle
	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

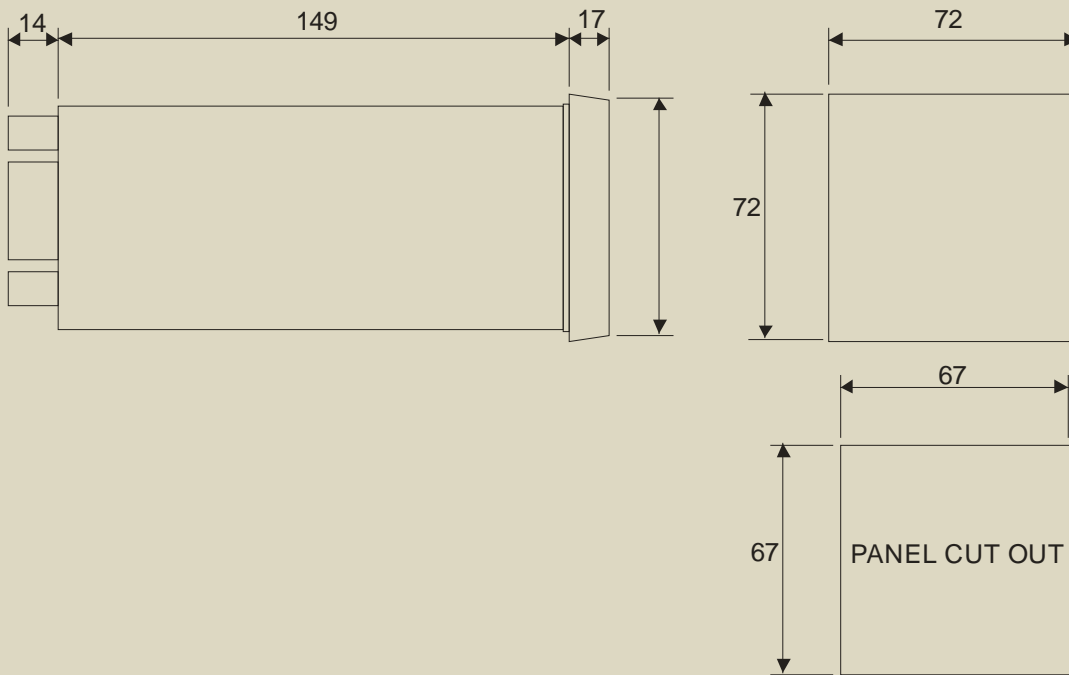
Storage temperature	-20 to +70°C
Operating temperature	-10 to 50°C
Relative humidity	95% maximum non condensing
Safety/Low Voltage Directive	73/23/EEC amended by 93/68/EEC BS EN 61010-1:2001, IEC 1010-1-1990
EMC Directive	89/336/EEC Basic Standard BS EN 61326:1998
EMC Emissions	BS EN 55011:1998
EMC Immunity	BS EN 61000-4-2:1995 BS EN 61000-4-3:2002 BS EN 61000-4-4:2004 BS EN 61000-4-11:2004

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.

Mechanical Dimensions

All dimensions in millimeters



Due to continual product development, LCM Systems Ltd. reserves the right to alter product specifications without prior notice.

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TYPE: ADP15

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