

Description

The ADW15 range of products is very versatile offering many software and hardware variants, designed to meet specific application areas, whether these be weighing or force measurement.

These expanded configurations enable systems to be simplified, by using a single indicator, where otherwise it may have been necessary to use several instruments or even a PC with software.

The ADW15's 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.

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

Options and Accessories include:

- A fast (peak & trough) 10mS input version (FPT)
- Panel mounting or DIN rail mounting
- Power Supplies for 115/230 V AC or 9-32V DC
- Communications outputs for printer, PLC or PC
- IF25 Interface module connects up to 25 ADW's to 1 RS232 port

The ADW15 can be supplied and calibrated with any of LCM Systems compatible sensors, and can be supplied on it's own or as part of a more complex system. Please contact LCM Systems technical department to discuss your application requirements.

Typical Applications

- Vessel/Silo weighing
- Simple batch control
- General force measurement
- Machinery condition monitoring
- Pump and motor torque control
- Crane overload protection
- Crane weighing

ADW15 Strain Gauge Input Indicator



Features

- Suitable for full bridge sensor with a sensitivity of ± 0.5 to ± 200 mV/V
- Fully programmable via keypad & communications port
- 4½ digit display
- 10V @ 150mA excitation with sense facility
- Isolated inputs and outputs
- Programmable in flight compensation
- Auto calibration
- High noise immunity
- Peak hold
- Auto zero (tare)

Strain Gauge Input Indicator

Specification

DC Analogue Outputs	Details	Order code
0 to 5V	V02	
0 to 10V	V04	
±10V	V06	
0-1mA	A01	
0-20mA	A02	
4-20mA	A03	

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

Communications Port	Details	Order code
RS485/232	RS485 - For up to 32 instruments on 1 bus, 4 wire RS232 – printer or direct connection to 1 device, 3 wire	COM 1
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
Cable Length	1km (depending on baud rate)

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.

Alarm/Control Outputs	Details	Order code
SPCO	1 relay on SP1	R01
DPCO	1 relay on SP1	R02
SPCO	2 relays on SP1& 2	R03

Other Information

Relays	230V at 5A AC resistive
Isolation	±130V RMS
Keypad	Inversion, Delay Times, PID values and Time Proportioning

Power Supplies	Details	Order code
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
Front Panel	P
Din Rail Adaptor	D

Communication Port CP Operation

All display data can be accessed via the communications port along with relay and EEPROM status. All user configurable data can be changed including EEPROM enable/disable and relay reset (address code cannot be changed).

Other Options & Accessories

20mA PC Communications Interface (IF25)

VisualLink PC SCADA Software

Base ADP15

Displays 7 segment LED 4.5 digit 10mm.3 x 3mm LED's 2 for relay status, 1 for program and hold indication.

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 61000-42:1995
BS EN 61000-4-3:2002
BS EN 61000-4-4:2004
BS EN 61000-4-11:2004

Physical

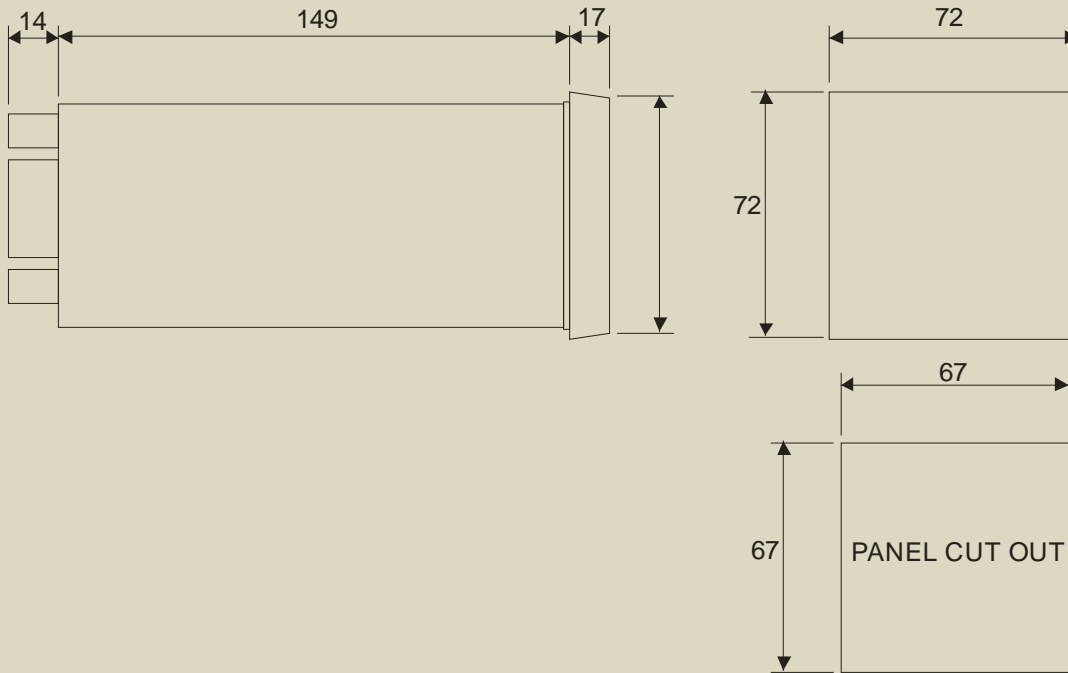
Case Dimensions DIN 72 x 72 x 163mm (excluding mounting terminal)
Case Material Grey Noryl, flame retardant
Weight 750 grams
Terminals 2.5mm, saddle field terminals
Accessibility All electronics removable through front panel leaving field wiring and case in situ.

TYPE: ADW15

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Mechanical Dimensions

All dimensions in millimeters



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

24/9/2008

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