

Load Cell Instrument ADW15

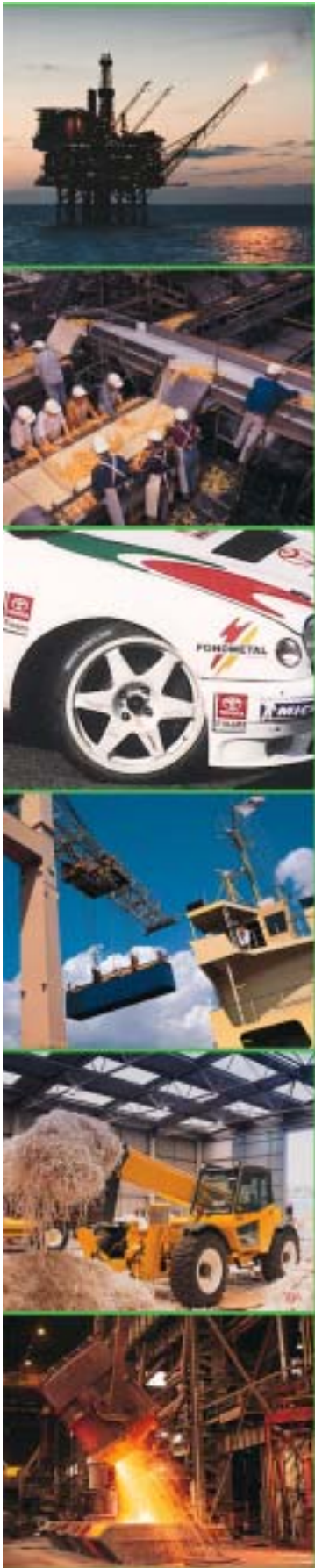


INTRODUCTION

The indicator offers both 4 –20mA or 0-10V analogue outputs from any strain gauge input. 1 pass calibration and setting of the analogue output range, make the unit extremely user friendly; being set up by a simple keypad operation.

FEATURES

- Variable gain strain gauge sensitivity from 0.5 to 200mV/V.
- 10V @ 150mA excitation to drive up to 4/350 ohm strain gauge bridges.
- High accuracy, low drift.
- Wide range of power supplies.
- Isolated analogue outputs
- Digital programming, calibration & display.
- Auto calibration.
- Peak Hold.
- Auto Zero.



Input Details

The input is of the load cell / strain gauge type. With transducer excitation voltage of 10V DC nominal. Compensation by \pm sense wires for cable, connection volt drops and any variation in 10V supply. Load Cell sensitivity is preset via DIL switches to between 0.5 to 200mV/V. Display: 7 segment LED 4.5 digit 10mm. 3 x 3mm LED's 2 relay status, 1 program and hold indication.

PARAMETER	DETAILS
Speed	Up to 10 readings per second with a digital filter to reduce speed.
Accuracy / repeatability	Up to 90 days $\pm 0.08\%$ of reading, $\pm 0.05\%$ FSD typical
Drift	Up to 0.002% $^{\circ}$ C typical @2.5mV/V
Resolution	15 bit.
Contact inputs	Available for auto tare, print and peak hold reset (voltage free)

Analogue Output Details

PARAMETER	DETAILS
Drive	4-20mA up to 1Kohm and 0-10V up to 2mA
Accuracy	Typical $\pm 0.08\%$ of output, $\pm 0.08\%$ FSD
Resolution	As display resolution, max 15 bits
Ranging	Fully keypad scalable over desired display range.

CE & Environmental Approvals

PARAMETER	DETAILS
Storage Temperature	-20 to +70 $^{\circ}$ C
Operating Temperature	-10 to +50 $^{\circ}$ C
Relative Humidity	95% maximum non stop condensing
Safety / Low Voltage Directive	73/23/EEC amended by 93/68/EEC to IEC 1010-1:1990, EN61010-1-1993
EMC Directive	89/336/EEC
Emissions	EN50 081 - 2 : 1992 (Heavy Industrial) EN50 081 - 1 : 1992 (Light Industrial) pr EN 50 093
EMC Immunity	EN50 082 - 2 : 1992 (Heavy Industrial) EN50 082 - 1 : 1992 (Light Industrial)

Options Available

PARAMETER	DETAILS
2 set points	Output through 5A, 230V AC SPCO relays, with a latching operation
20mA loop	Enabling up to 254 units to be multi dropped to 1 x RS232 via IF25 interface(s) (isolated)
RS485	Enabling up to 32 units to be multi dropped (isolated)
RS232	For 1 to 1 connection and standard printer drive (isolated)
Print Operation	By closure of voltage free contact
Baud Rates	300, 600, 1200, 2400, 4800, 9600 (19200 MANTRABUS only)
Analogue Outputs	4-20mA, 0-5V, 0-10V, $\pm 10V$
Power Supply	230VAC, 110VAC, 9-32V DC, 16-60VDC
Mounting	Front Panel or Din Rail Adaptor

Dimensions

ABS Case dimensions : DIN 72 x 72 x 163mm (excluding mounting terminal)
Case Material : Grey Noryl, Flame retardant.

CE Approved

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