

Panel Mount Weighing Indicator/Controller

Features

- Variable gain strain gauge sensitivity from 0.5 to 200mV/V
- Fully programmable via keypad & comms port
- 4.5 digit high resolution
- Excitation compensation
- 10V @ 150mA excitation to drive up to 4/350 ohm Strain Gauges
- Standard strain gauge input 100mS sampling rate
- Isolated inputs & outputs
- Programmable in flight compensation
- Auto calibration
- High noise immunity
- Peak hold
- Auto zero (Tare)
- Isolated inputs & outputs



Outputs

- Analogue - Industry standard
- Relays
- Communications
- Printer Drive

Options & Accessories

A Fast (Peak & Trough) 10mS input version (FPT)
 Panel Mounting or Din Rail Mounting
 Supplies for 115/230 VAC or 9-32V DC
 Communications Outputs for Printer, PLC or PC

IF25 Interface module connects up to 25 ADW15's to one RS232 port
 Printers DP data only and TDP for real time/date

Specifications

Inputs

| | | | |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------|
| Calibration | Automatic digital by use of keypad and 1 (or 2) known weights. Manual calibration can also be selected | Sensitivity | Preset via DIL switches between 0.5 to 200mV/V |
| Auto Tare | By pressing keys ▶ and then Ⓜ display will zero. Auto tare value can also be viewed and manually changed if required. Auto tare value is retained on powerdown. | Excitation | 10V DC nominal, 150mA maximum |
| | | Compensation | By \pm sense wires to compensate for cable, connection volt drops and any variation in 10V supply |
| | | Accuracy | 90 days \pm 0.08% of reading \pm 0.05% of FS typical |
| | | Drift | 0.002%/°C typical @ 2.5mV/V |

DC Analogue Outputs

| Order Code | Range | Order Code | Range |
|-----------------|-----------------------------------------------|-----------------|-----------------------------------------------------------------|
| V02 | 0 to 5V | A01 | 0 to 1mA |
| V04 | 0 to 10V | A02 | 0 to 20mA |
| V06 | -10 to +10V | A03 | 4 to 20mA |
| Max Current out | 50mA | Max Current out | 50mA |
| Accuracy | typical \pm 0.08% of output, \pm 0.08%FSD | Isolation | \pm 130V RMS or DC max to analogue input or to any other port |
| Resolution | as display resolution, max 15 bits | Ranging | Fully keypad scalable over desired display range |
| Calibration | by 15-turn pre sets for gain and offset | PID | Power level, when selected = 12 bit resolution output |
| Inversion | By keypad value | | |

Communications Port CP Operation

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

Communications Port

| Order Code | Type | Details |
|------------|-----------|------------------------------------------------|
| COM1 | RS485/422 | For up to 32 instruments on 1 bus, 4 wire |
| S01 | 20mA | For up to 25 instruments per interface, 4 wire |

Cable length, 1km (depending on baud rate)

Baud rates, 300, 600, 1200, 2400, 4800, 9600 (19200 MANTRABUS only)

Electrical isolation, \pm 130V RMS or DC max to analogue input or any other port

Formats, MODBUS RTU, MANTRABUS and printer output formats

Alarm/Control Outputs

| Order Code | Type | Function |
|------------|------|--------------------|
| R01 | SPCO | 1 relay on SP1 |
| R02 | DPCO | 1 relay on SP1 |
| R03 | SPCO | 2 relays on SP1& 2 |

Relays, 230V at 5A AC resistive

Isolation, $\pm 130V$ RMS

Keypad Programmable options: Hysteresis, Latching, Output Inversion, Delay Times, PID values and Time Proportioning.

Power Supplies

| Order Code | Type |
|------------|--------------------------|
| W240 | 220V-230V AC 50-60Hz 10W |
| W110 | 110V-120V AC 50-60Hz 10W |
| W12/24 | 9-32V DC 10W isolated |

Base ADW15

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 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

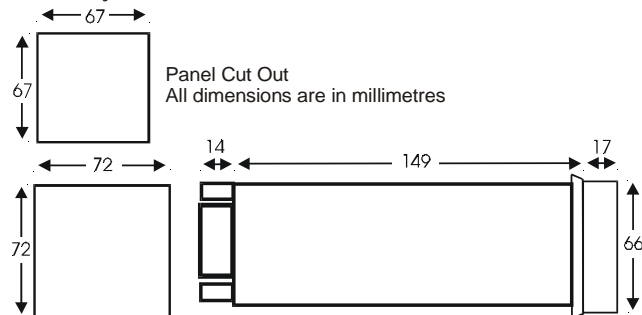
Retention: 10 years for set up values, minimum of 100,000 write cycles.
Protection of data and function(s): Watchdog timer giving repeat auto resets. Impending power detection and hold off. Keypad security and time out.

CE & Environmental

| | | | |
|-----------------------|----------------------------|------------------------|-------------|
| Storage temperature | -20 to +70°C | European EMC Directive | 2004/108/EC |
| Operating temperature | -10 to 50°C | Low Voltage Directive | 2006/95/EC |
| Relative humidity | 95% maximum non condensing | | |

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, Mantracourt Electronics Limited reserves the right to alter product specifications without prior notice.