

## Indicator for Temperature, 0-10 V, 4-20 mA, Speed & Potentiometer



*An extremely flexible digital indicator and display system for use with a wide range of sensors and transducers including volts, amps, temperature, frequency, speed, load, force, pressure, torque, LVDT, RVDT and many more*

### Introduction

The digital architecture offers very easy one-pass calibration and fast setup. This versatile device offers options of isolated analogue outputs, latching relays or digital outputs for control or alarm functions. Having 2 setpoints with settable hysteresis, inversion and latching, all of these facilities being set in engineering terms.

The RS232 or RS485 options provide for digital communications (including setup) and can support label or ticket printers.

A panel mount or DIN rail mount version is available see the ADP15 or a wireless telemetry version, see T24-SO and SerialDIS.

### Specification at a Glance

- 8 digit 12.7 mm LCD display
- 8 button keypad with user configurable fully isolated 4-20 mA and 0-10 V analogue outputs
- Setpoints and event handling using digital inputs and 2 x SPCO relays
- PID control capability, peak hold, measurement in any engineering units
- RS232 or RS485 communications for setup, data transfer or label/ticket printing
- AC or DC power supply options
- IP65 / NEMA4 ABS bulkhead mounting enclosure dimensions 200 x 120 x 75 mm



### User Benefits

- Large LCD display and keypad
- Wide range of plug in input modules that provide transducer excitation
- Fully digital set-up and calibration using built-in LCD display and keypad or comms
- High accuracy and high stability over a wide temperature range

### Ideal Applications

- Industrial Processing



## Related Product



**ADW15**  
Universal digital panel meter for  
measuring 4-20 mA, 0-10 V



**SMW**  
Weighing indicator and  
weight controller

## Case Study

### The Application:

From time to time the pH and chlorine levels will fluctuate at each stage in the treatment process without actually being of significance or detrimental to the final product. A disadvantage of using an instrument connected to a single probe is that probe failure can occur and will lead to a false alarm. Additionally, this relies on a plant operator regularly checking the display to ensure parameters are not being exceeded.

### The Solution:

By using pairs of dual input instruments acting as signal comparators, one for a pair of chlorine monitoring probes, and the other for pH monitoring probes. The instruments take the 4-20 mA outputs from the probes as their inputs and electronically compares the values. The differences in the respective values are then displayed locally - engineering units (mg/l) are used for the chlorine and pH units for the pH probes.

When a discrepancy in the measured value between the two probes occurs, the signal output is frozen at the last

valid reading. A user adjustable alarm is provided so that the plant controller will be notified in the event of a pre-set difference in reading from a pair of probes occurring.

Additionally, the alarm is only initiated if the alarm threshold

is exceeded for more than a user pre-set period of time. A manual selector switch is included to allow the analogue signal from either of a pair of probes to



directly control the process - in case of probe failure.

The main advantages are:

- Operators can see the probe readings and decide if they want to take action
- The alarm initiation is user definable
- The readings of two probes are compared

## CE & Environmental

Storage temperature	- 20 to +70°C
Operating temperature	- 10 to +50°C
Relative humidity	95% maximum non condensing

CE Environmental Approvals	
European EMC Directive	2004/108/EC
Low Voltage Directive	2006/95/EC



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