



### Cleanroom Management

Apreco's cleanroom DPMA system provides an effective means of monitoring and regularly recording the differential pressures held within the Clean area. The Differential Pressure Monitor & Alarm system logs data enabling investigation of alarm conditions if required. The operator interface is kept as simple as possible to minimise staff involvement, thus allowing staff to concentrate on their work, whilst the DPMA monitoring system looks after the working environment.

### Features

- Continuous Monitoring.
- Multi-channel capacity.
- User-set alarm limits and alarm delay period for each channel.
- Lowest out-of- limits value retained to aid fault diagnosis.
- Audible/Visual Alarm manually reset.
- Wall-mounted touch screen, or PC interface.
- Self-calibrating pressure sensors.
- Flexible, configurable software.
- Expandable system allows additional sensors to be added in the future.

### Benefits

- Automatic monitoring of Cleanroom pressures.
- Ideal for the smaller facility as it can be controlled and operated by site personnel without the need for specialist operators.
- Menu screen makes set-up and interrogation simple.
- Historical data assists in analysis of alarm occurrence 24 hours a day 7 days a week.
- Full reporting features.
- Alarm events can be sent to key personnel by methods such as email and SMS.
- Full secure remote access is available.

# DPMA General Information

## Installation

Each system is supplied in kit form which is easily installed by a competent electrician. Apreco can provide you with a quotation for installation if required.

The system consists of a main enclosure, sensors, sensor plates, wall mounted interface module, and all related cabling and pressure hose as detailed in the 'specification' section below.

Full installation and operating instructions are included with each system kit.

## Operation Of Sensor Monitor/Alarm

Through the touch display screen or PC interface, each sensor channel can be set to alarm at a specific set point.

To eliminate unwanted alarms, each channel can be set to specific delay periods to eliminate spurious alarms.

During alarm periods, the controller will retain the pressure values recorded in its memory. This data can be either read directly through the display screen or with a suitable interface on a PC.

The display screen gives quick visual indication as to which area is in an alarm condition. An optional audible warning siren and alarm beacon can be supported by the system.

When an alarm has been registered, it remains latched until the differential pressure has been restored in all areas where there has been an alarm condition and the alarm has been acknowledged. This ensures that alarm

## Regulatory Compliance

The FMS software has been developed to enable 21 CFR part 11 compliance. FMS is assigned GAMP category 4 as configurable software. The software is designed to meet the regulatory requirements of MHRA, BSI ISO 9000, US FDA, EU Tissue & Cell Directives (HFEA regulated).



## Specification

Std Enclosure x 1	Size dependent on number of sensors
No. of channels (sensors)	Multi Channel
Sensor Range	-50/+50Pa (standard)
Controller x 1 (including remote display)	DPMA Controller (Monitoring Software)
Beacon Alarm x 1	24VDC
Pressure Hose	Clear tube 5 x 8 (40m per channel)
Sensor Plates	As required
Mains Supply	230VAC switched & fused

## Additions

The system has the ability to monitor other parameters including Relative Humidity, Temperature and other environmental sensors.

*The information contained within this data sheet is subject to change due to continuing research and development.*