Application Document

PROVEN DATA LOGGING SOLUTIONS

Clean Room Pressure Monitoring

Maintaining accurate differential pressure is critical to the proper functioning of a clean room.

Pharmaceutical facilities rely on high standards of indoor air quality. Critical environments such as clean rooms need assurances that the room's environment is monitored and maintained. Supervising a clean room environment includes managing the air filter system, controlling the HVAC system, and monitoring room temperature, humidity and pressure etc. Positive pressure helps to protect clean areas from contaminants entering from adjacent rooms while negative pressure helps to contain harmful particles, such as microorganisms in a particular area.

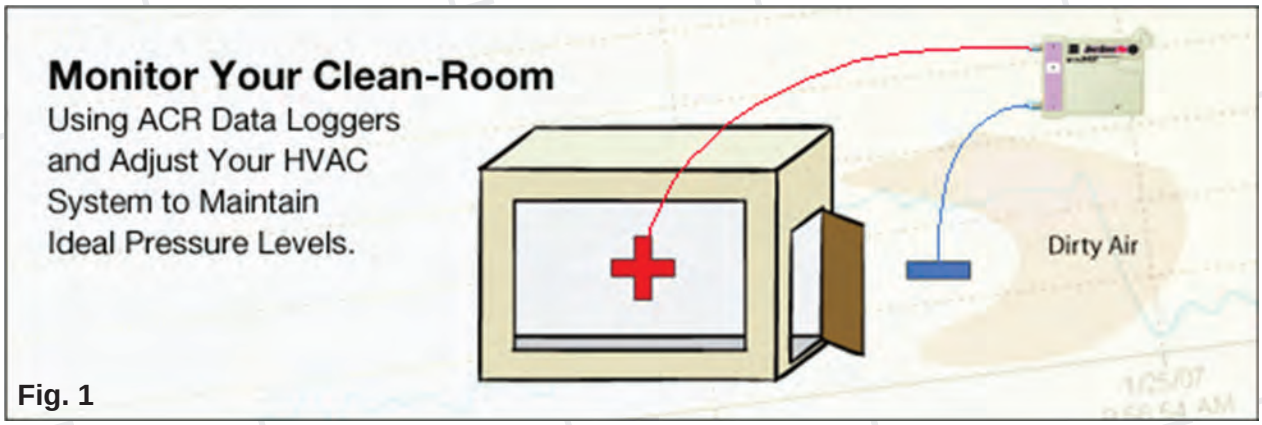


Fig. 1

Challenge:

Monitoring critical performance criteria such as differential pressure is vital to maintaining optimal clean room conditions.

Do you require?

- A method for collecting and monitoring data
- Accurate monitoring of differential pressure
- Validation of clean room pressure (either positive or negative)
- Easy collection and retrieval of informative data
- Simple remote download of data

Solution:

Installing a differential pressure data logger to monitor your clean room will prevent undetected pressure changes and help to comply with FDA clean room requirements and regulations. ACR's SmartReader Plus 4 LPD data logger is the ideal choice for clean room monitoring. The logger is self-contained and can monitor and record differential pressure right out of the box.

ACR's SmartReader Plus 4 LPD Data Logger:

- Provides proof of clean room pressure conditions
- Includes a 10-year warranty on the battery
- Has a very high degree of accuracy (± 0.2°C and ± 0.05" WC)
- Utilizes industry leading TrendReader 2 software
- NIST traceable calibrations available
- Ability to remotely download data via the internet or modem
- Supported by quality system (ISO: 9001:2000)
- Free technical support for life of data logger

ACR 24/7/365 10yr Battery

Application Document

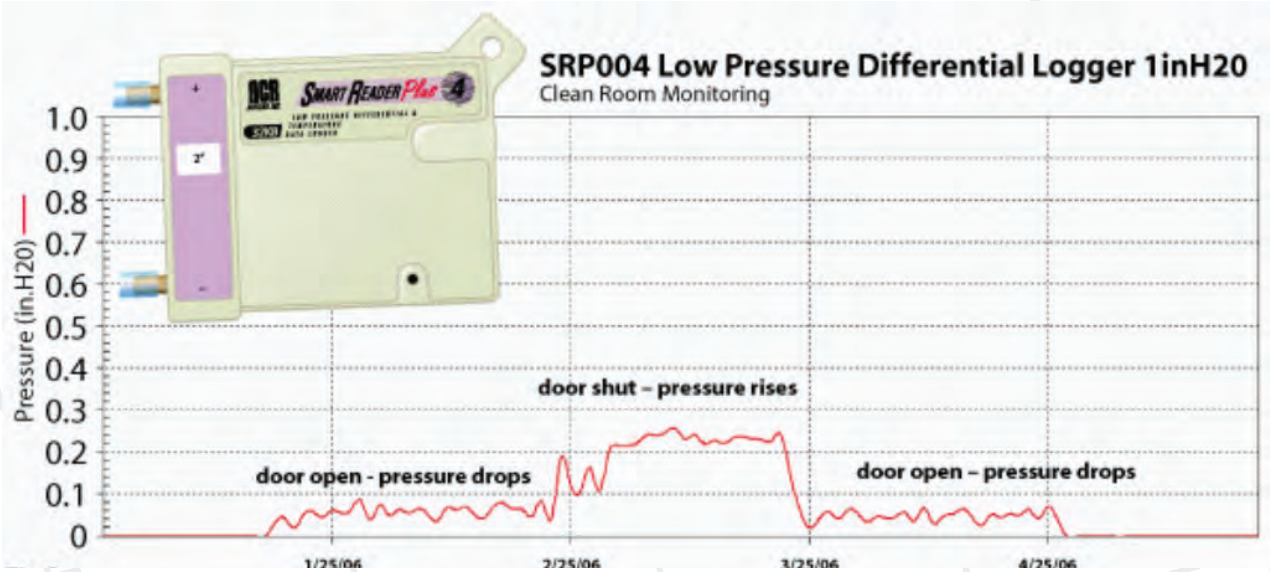
PROVEN DATA LOGGING SOLUTIONS

Deploying the data logger and downloading the information is easy...

1) Simply place the ACR SmartReader Plus 4 LPD data logger in the area to be monitored (the logger has a magnetic backing for convenient placement), place the positive port pressure hose in the area where you need to maintain positive pressure, place the negative port hose in the area where you need to maintain negative pressure. The logger's internal pressure sensor will calculate the differential pressure. (See Fig. 1)

2) When you're ready to view the logged data, remove the logger and connect it to your PC with ACR's IC-102 USB communications cable.

3) With TrendReader 2 software installed on your computer, simply download the information collected by the data logger to view in either tabular or graphical format. (See Fig. 2)



Ordering Information:

Equipment	Description	Catalog #
SmartReader Plus 4 LPD-2	2-Channel (12-bit) Pressure & Ambient Temperature Data Logger - 32KB ± 2"WC	01-0312
SmartReader Plus 4 LPD-10	2-Channel (12-bit) Pressure & Ambient Temperature Data Logger - 32KB ± 10"WC	01-0314
Pressure Hose	Flexible Hose for Low Pressure Differential data logger	30-0015
TrendReader 2 Interface Pkg	Software on CD & USB Interface Cable	01-0226