



setra FLEX™

A Monitoring and Sensing Solution
for Critical Environments

We design and deliver
premium sensing solutions





setraFLEX™

The **Setra FLEX™** is a complete monitoring and control solution in a pre-configured and easy-to-use package. Offering all of the essential parameters that require monitoring, the FLEX will meet all of your critical environment needs.

Going beyond room pressure

From the pressure experts comes the most accurate and reliable room pressure monitor in the industry – but that's not all. Now you can monitor and control pressure, temperature, humidity, and air changes per hour; plus, any two additional parameters you may require. Visualize the data by either hard wiring the sensors, or by mapping network objects via BACnet. The FLEX is flexible enough to meet any HVAC sensing or control need and customizable enough to monitor energy usage and industrial equipment.

No programming, easy configuration

The Setra FLEX comes out-of-the-box ready to configure at the job site. No programming or training is required for setup. Just configure your sensors and network on-site and the FLEX is ready to go. If there are many units to configure, our unique USB cloning feature helps you get them done even faster, saving time and money.

FLEX RM & FLEX RC

FLEX comes in two models, providing both the best price-to-performance as well as the one-of-a-kind feature set to meet the most difficult application needs. Both FLEX models can be controlled over the network via read/write BACnet objects, permitting both local control via the touch screen or control from the BMS.

SETRA FLEX FEATURES

- Monitor and Control Up to 3 Spaces
- 6 Parameters per Room, Total 18
- 7" Touch Screen, Works with Medical Gloves
- Integrates with BMS Systems
- BACnet/IP and BACnet MS/TP
- USB Cloning Feature Saves Time
- High Accuracy Pressure Transducer
- Expansion I/O Available

APPLICATIONS & STANDARDS

- Hospitals - ASHRAE Standard 170
- Pharmacies - USP 797 & USP 800
- Bio-safety & Vivarium Laboratories
- Pharmaceutical Manufacturing
- Custom for OEM, Energy, Industrial

The FLEX™ Display

The FLEX has a large, 7-inch touch screen display which provides swiping functionality and use with medical gloves. The high resolution display allows the user to easily view the graphics and text from across the room.

Room label

Room safety status: NORMAL, WARNING, ALARM, STANDBY

Intuitive full screen and setup icons

Status icons and customizable text

Silence alarm and door indicator

Badges show room parameters. Swipe to see more

Room 121 OCCUPIED

NORMAL

SURGERY IN PROGRESS

0.028 "WC - POS Pressure

75.5°F Temperature

37 %RH Humidity

22.0 ACH

Four user-defined room profiles, plus standby

Room 121 OCCUPIED

UNOCCUPIED

OCCUPIED

CLEANING

VHP MODE

STANDBY

SURGERY IN PROGRESS

0.028 "WC - POS Pressure

75.5°F Temperature

37 %RH Humidity

22.0 ACH

Alarms change status bar, turn screen red, and indicate badge in alarm

Mercy OR 23 OCCUPIED

ALARM

SURGERY IN PROGRESS

0.007 "WC - POS Pressure

75.5°F Temperature

37 %RH Humidity

22.0 ACH

FLEX-RC enables any parameter to go into local override, and for a limited time, saves energy

Operating Room 17 OCCUPIED

STANDBY

Temperature 72.5°F

SET

CANCEL

OVERVERRIDE TO 68°F

OVERVERRIDE UNTIL 6:00 PM

Pressure Temperature Humidity Air Change

Swipe to view all rooms at once

Isolation 24-A	Isolation 24-B	Anteroom
NORMAL	NORMAL	NORMAL
DROPLET PRECAUTION	READY FOR PATIENT	SAFE TO ENTER



Healthcare



Life Sciences



Laboratories



Cleanrooms

With Setra FLEX™, you have options

Setra's environmental monitoring technology has been field-tested in hospitals, pharmacies, laboratories, and cleanrooms across the globe for over a decade. The Setra FLEX™ platform easily exceeds the growing regulatory requirements in the some of the most tightly-controlled spaces in healthcare, research, and manufacturing.

Setra FLEX™ can be configured with either third-party sensors, or can be used in conjunction with Setra's line of differential pressure, humidity, and particle sensors – helping healthcare engineers keep critical environments safe for everyone.

Setra is trusted by

Harvard Medical School

Genzyme

Mayo Clinics

Merck

Brigham and Women's Hospital

Abbott Laboratories

St. Judes Medical Center

Memorial Sloan Kettering Cancer Center

Stanford University Medical Center

and many other institutions

Humidity Sensing

- Accuracy of ± 1.3 RH units
- Filtered with hygroscopic coating
- For demanding climate control



Pressure Monitoring

- Use anywhere dp sensing is needed
- Simple red/green indicator
- Alarming & trending



Particle Sensing

- First with integral pump
- Compact size
- Particle sizes 0.5 μ m to 5.0 μ m



Users are able to configure the FLEX multiple ways: wire sensors directly to the on-board I/O or via the optional Expansion I/O module. Or, if you prefer, pick up pre-wired sensors from third-party BMS controllers and map to FLEX via network configuration.



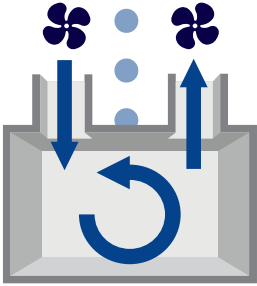
Multi-Function Monitor

- Supports 3 rooms & 18 parameters
- Sensing & Control
- BACnet/IP & BACnet MS/TP



Pressure Sensing

- High accuracy pressure sensing
- On-board or external sensors
- For hospital, lab, & pharmaceutical use



Air Change Rate

- Computed on board from CFM
- Airflow signal from input or network
- Fan status alarming



Light Sensing

- Use any third-party sensor
- User-defined badge on FLEX
- For use in vivariums

Flexibility for Installation

FLEX was designed with construction installations in mind, and the flexibility often needed to accommodate project site challenges and installer preferences. Want the sensor in the wall? No problem. Order FLEX with an on-board transducer. Want all the pressure tubing above the ceiling? No problem. Order FLEX with external transducers; or combinations of both. Need additional I/O for your rooms? No problem. Order FLEX Expansion I/O, and get support to hard-wire all the sensors you need.



Easy Installation

1. Rough-in wires and tubing.
2. Connect pressure fittings and I/O.
3. Touch screen configures room.
4. Clone configuration for other units.
5. Done. Site commissioned.

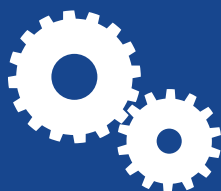
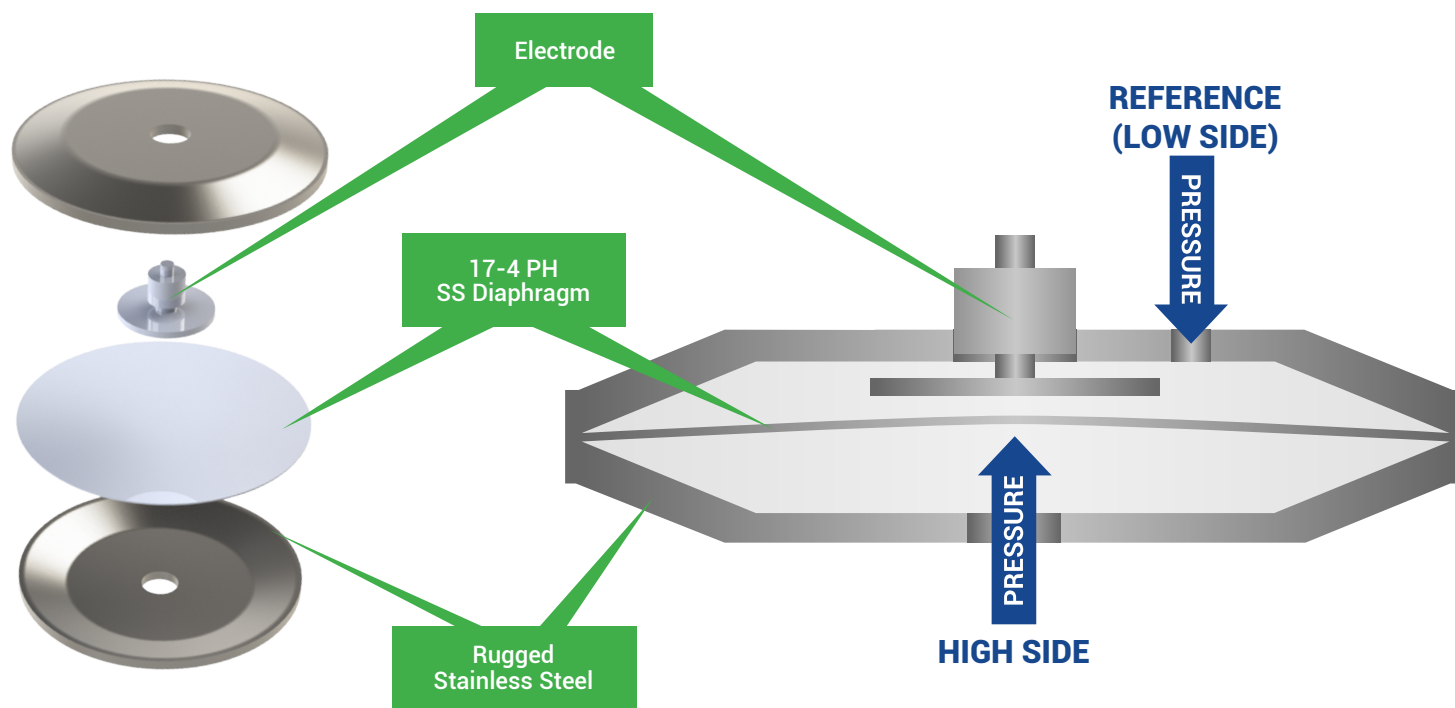


Accuracy

Every unit includes ultra-high accuracy $\pm 0.25\%$ full scale sensors, with 0.0001" W.C. resolution.

Variable Capacitance

When used for room differential pressure, Setra FLEX has the option of either an on-board or external sensor, depending on the installer's preference. In either case, Setra's industry-best high-accuracy sensor is used. Our patented variable capacitance technology is based on an all stainless steel micro-tig welded sensor. The radially tensioned stainless steel diaphragm and insulated stainless steel electrode, positioned close to the diaphragm, form a variable capacitor. This provides industry-best accuracy for very low pressures and unmatched long-term stability. Unlike competitors, who use a flow-through sensor that can become clogged or contaminated, Setra's dead-ended sensors ensure ultimate accuracy for patient safety.



Reliability

To Setra, reliability means long-term stability of sensors that drift <math><0.05\%</math> of full scale per year.



Custom Solutions

As a flexible platform, FLEX can be modified at the factory to meet specific application needs. Contact your sales representative for more information.



setraFLEX™

versus the competition



Key Feature	Setra FLEX	Competitor #1	Competitor #2
7" touch screen display	✓	✗	✓
Support for 3 rooms	✓	✓	✗
User-defined room profiles	✓	✗	✓
User-defined room parameters	✓	✗	✗
Support for 18 parameters	✓	✗	✗
Integrated multi-room monitor	✓	✓	✗
BACnet/IP communications	✓	✗	✗
Configurable over the network	✓	✗	✗
Expandable I/O	✓	✗	✗
USB cloning feature	✓	✗	✗
High-accuracy 0.25% sensor standard	✓	✗	✗
100% made in the USA	✓	✗	✗

Have a question?

Talk to a Setra representative today about your project needs.

 800.257.3872

 www.setra.com

Find us on:



Setra Systems, Inc.
159 Swanson Road
Boxborough, MA 01719

800.257.3872
www.setra.com

