

Differential Pressure Sensor

Automated Airflow Information.
Trusted Safety. Intelligent
Pressurization Monitoring.

OVERVIEW

The OneVue Sense Differential Pressure Sensor helps healthcare and laboratory environments maintain safe and compliant airflow conditions. Isolation rooms require negative pressure to prevent airborne contaminants from escaping, while surgical suites and clean spaces rely on positive pressure to ensure no unclean air enters. This solution continuously detects ultra-low pressure changes, eliminating manual checks and providing real-time visibility through the cloud-based OneVue® software platform.

BENEFITS

Protect Your People

Manage correct airflow direction in isolation rooms to reduce airborne contamination risks.

Keep Environments Clean

Maintain outward airflow in positively pressurized rooms like surgical suites and clean rooms.

On-The-Go Awareness

Mobile alerts notify staff instantly when room pressure changes unexpectedly.

Quick Suspend Mode

Door Open/Closed switch allows rapid suspension of alerts during patient care workflows.

Smart, Connected Data

OneVue® provides historical pressure logs for audits and regulatory compliance.

Continuous Monitoring

Ensure safe environments in critical areas across the facility 24/7.

USE CASES

- Negative pressure isolation rooms
- Operating rooms and sterile corridors
- Pharmacy clean rooms and compounding areas
- ICU and immunocompromised care units
- Research labs and biocontainment zones



OneVue Sense Differential Pressure Sensor

SENSORS

421-000003 Differential Pressure Sensor, 120V, Wi-Fi Model, includes AC Power Adapter, Backup Batteries, Silicone Tubing and Wall Plate Assembly Kit. Requires OneVue Service and Support plan.

421-000004 Differential Pressure Sensor, PoE, includes Cat5 Cable, Backup Batteries, Silicone Tubing and Wall Plate Assembly Kit. Requires OneVue Service and Support plan.

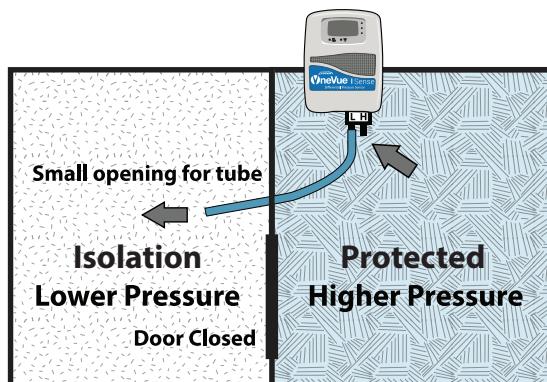
SENSOR ACCESSORIES

400-000080 Sensor Battery Pack 3.0v Energizer L91-FR6 3.0V Battery Pack (2 AA batteries in single pack)

400-000078 Power Cord Extension (2 meter), Extension cable for Sense power supply, 2 meter (~ 6 feet) length. USB mini to USB mini.

400-000082 Sensor Power Supply 5 VDC (1 A max) power supply

498-000004 Replacement wall plate assembly



Features

Automated continuous monitoring with customizable text, phone, email, audible, and visual alerts

Ultra-sensitive detection of minor pressure variations

Door Open/Closed switch for quick suspend mode

Access to OneVue software with audit-ready reporting and 10-year cloud data retention

Scalable across multiple rooms, wings, or buildings

Supports infection prevention and clean room standards

AC or PoE power options - both with battery backup

ENVIRONMENT

Operating Temperature

32 °F to 122 °F (0 °C to 50 °C), indoor use only

Storage Temperature

-4 °F to 140 °F (-20 °C to 60 °C)

CERTIFICATIONS AND COMPLIANCE

FCC, CE, and IC-compliant

SOC2 Compliance

Working toward FDA 21 CFR Part 11 and FedRamp Compliance

SPECIFICATIONS

Measurement Type

Differential Pressure (two-port)

Transmission Rate

User-defined (15 minutes to 12 hours)

Reading Accuracy

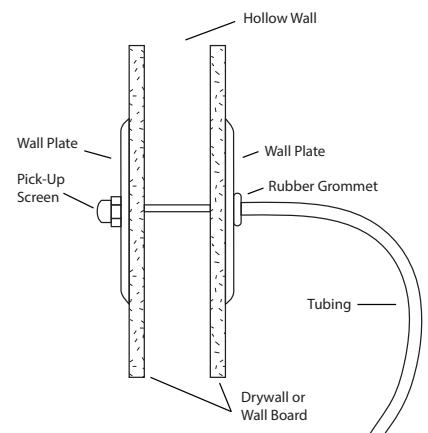
± 0.2 Pa + 3% of Reading

Accuracy

LCD Resolution: ± 0.001 inches H2O (±0.2 Pa) Max Reading: ± 0.500 inches H2O (± 125 Pa)

Calibration

Factory calibrated with digital temperature compensation over the ± 0.5 inches H2O range (± 125 Pa range)



ENCLOSURE

Acetal or ABS Plastic

Dimensions

4.7" H x 3.7" W x 1.3" D
(11.93cm x 9.39cm x 3.30cm)

Port Cover

Adds 1.6" (4cm) to height of unit

WIRELESS & NETWORK COMMUNICATION

Encryption Protocols

WEP, WPA, WPA2

Authentication Protocols

LEAP, EAP-FAST, PEAP, EAP-TLS

Data Packet Size

Typically less than 5 kilobytes (kB)

OPERATION

Alerts

Audio, visual LED, LCD display

Audio Alert Reset Period

User-defined (next alarm, 15min, 30min, 1hr, 2hr, 3hr, 4hr)

Configuration

OneVue, OWDC app, and Primex Device Configuration software

Stored Reading Capacity

4,096 readings

POWER

421-000006 (Wi-Fi Model) Includes:

- 400-000080 Battery Pack or 2 AA Energizer ® Ultimate Lithium Batteries
- 400-000082 AC Power Supply, 300mA @ 5 VDC with 3-ft. (.91m) standard power cable
- Optional: 6-ft. (1.82m) extended cable available 400-000078

421-000008 (PoE Model) Includes:

- Compliant with IEEE 802.3 af standard
- 400-000080 Battery Pack or 2 AA Energizer ® Ultimate Lithium Batteries
- 4-ft POE cable 100-000385
- Optional: 400-000082 AC Power Supply, 300mA @ 5 VDC with 3-ft. (.91m) standard power cable
- Optional: 6-ft. (1.82m) extended cable available

Battery Power Backup

- 2 AA 1.5V batteries; use of Energizer® L91 Ultimate Lithium batteries recommended to minimize maintenance and maximize uptime