

# Superior Sensor Technology's New 4-Port, Dual Pressure Sensor for PAP Devices Reduces Design Complexity

*First Dual Pressure Sensor for PAP Machines with Dedicated Ports for Measuring Patient Airway Pressure and System Flow*

LOS GATOS, CA, USA, May 31, 2022 /EINPresswire.com/ -- [Superior Sensor Technology](#) today announced the industry's only 4-port, dual pressure sensor for Positive Airway Pressure (PAP) machines used in sleep apnea, COPD, asthma and home ventilator applications. The new [CP301](#) integrates a gauge pressure sensor and a differential pressure sensor into a very small package with dedicated ports for each sensor, making it easier and more cost effective to design highly accurate, flexible PAP devices.



CP301 Dual Pressure Sensor for PAP Devices

The CP301 pressure sensor greatly improves the airflow and air pressure capability in Continuous Positive Airway Pressure (CPAP), Bi-Level PAP (BiPAP) and Automatic PAP (APAP) devices. Superior Sensor is the only company to integrate the gauge and differential sensors into one product with 3 dedicated ports on the top and 1 dedicated port on the bottom of the device. This level of integration eliminates the need for a second physical sensor and reduces tubing and routing requirements in the device, which simplifies design, speeds time to market, reduces PCB space and lowers system costs. The CP301 is also the industry's only pressure sensor for PAP devices to support 64 configurations, making the system design more efficient and flexible.

“

Expanding our CP Series product line to include a dedicated four port option will further simplify the design and improve the performance and flexibility of PAP devices,”

*Anthony Gioeli, Vice President of Marketing, Superior Sensor Technology.*

Based on the company's [NimbleSense™](#) System-in-a-Sensor Architecture, the CP301 offers additional performance characteristics that significantly increase the airflow and air pressure capabilities of the PAP machine to improve patient comfort and enhance overall user experience.

- Both integrated sensors in the CP301 have industry leading accuracy within 0.05% of the selected pressure range, total error band within 0.15% of FSS and long-term stability within 0.15% of FSS per year. This accuracy is due to the architecture's very low noise floor, ensuring noise caused by fans or motors does not cause errors that could disrupt the therapy.
- The CP301 has very fast 2 millisecond response time, providing timely feedback to the PAP machine to quickly adjust the airflow based on apnea events, maximizing patient comfort and machine efficiency.
- Each of the pressure sensors in the CP301 includes four factory calibrated pressure ranges and there are four selectable bandwidth filters, enabling the device to support 64 configurations. This enables manufactures to design flexible PAP machines for a broad range of age groups and medical concerns.

"Expanding our CP Series product line to include a dedicated four port option will further simplify the design and improve the performance and flexibility of PAP devices, which greatly enhances the quality of life for people suffering from sleeping disorders," said Anthony Gioeli, Vice President of Marketing, Superior Sensor Technology.

Limited quantities of the CP301 are currently available directly from Superior Sensor Technology. Production volumes will be available the end of Q2 with immediate delivery from Digi-Key Electronics and Mouser Electronics.

Superior Sensor Technology is revolutionizing the high performance, cost driven pressure sensor market by developing integrative, highly intelligent solutions for industrial, HVAC and medical applications. The company's technology is based on a breakthrough system-in-a-sensor, proprietary architecture, called NimbleSense™, which significantly improves overall sensor performance while adding exclusive application specific system features. Superior Sensor Technology was founded in 2016 and is based in Los Gatos, CA.

Catherine Batchelor  
Superior Sensor Technology  
+1 208-634-9472  
cbatchelor@superiorsensors.com

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/574634767>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our [Editorial Guidelines](#) for more information.

© 1995-2022 Newsmatics Inc. All Right Reserved.