



PRESS RELEASE

FOR IMMEDIATE RELEASE

BREAKTHROUGH COMBINATION VACUUM TRANSDUCER UNVEILED

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Sens4 A/S, a developer and manufacturer of vacuum and pressure measurement solutions, is introducing the world's first vacuum transducer that combines capacitance diaphragm sensor technology with piezo diaphragm, and wide-range MEMS Pirani heat-loss sensor technology. This unique combination provides 9 decades of measuring range with more than 5 decades of gas independent measurement from 1333 to 5.0E-3 mbar (1000 to 3.75E-3 Torr) and an indirect heat-loss pressure measurement down to 1E-6 mbar (7.5E-7 Torr).

Capacitance manometers are used in many vacuum applications and offer advantages such as corrosion resistance and gas independent pressure measurement. Their limited dynamic measurement range often requires several transducers to cover the vacuum pressure range from atmospheric pressure to medium vacuum.

"From dialogue with customers, we identified a market need in applications that required gas independent vacuum pressure measurement but was too cost sensitive to adapt traditional single sensor capacitance manometers." said Ole Wenzel, CEO of Sens4 A/S. Ole continues "Last year we introduced the record-breaking SmartPirani™ transducer and by combining our existing technology with capacitance diaphragm sensor technology we invented an even smarter multi-sensor combination transducer that simplify vacuum design.

Traditional capacitance manometers have a zero-drift tendency that requires the user to perform frequent zero adjustment. The new TriCAP™ series introduces an automatic zero adjustment of the capacitance sensor based on the measurement from the MEMS Pirani to ensure a stable zero and extend the usable range of the gas independent capacitance manometer.

"Applications like PVD (Physical vapor deposition) uses multiple different gases to form the coating process recipe and therefore gas independent measurement in combination with base pressure verification is required." said Dr. Caspar Christiansen CTO of Sens4 A/S. Caspar continues: "In such PVD applications the TriCAP™ is a unique all-in-one solution that can measure base pressure, control the process gas pressure, and control ventilation of the vacuum process chamber to atmospheric pressure"

The TriCAP™ furthermore provides a vacuum gas analysis capability by comparison of the gas independent diaphragm with gas dependent heat-loss measurement, enabling water vapor end-point detection in vacuum drying applications.

Applications for the TriCAP™ includes Physical Vapour deposition (PVD), freeze drying, sterilization, furnace heat treatment, semiconductor load-locks and mass spectrometers.

Press contact: Ole Wenzel, Email ole@sens4.com, Phone+ 45 88447044



About Sens4 A/S

Sens4 is a Danish technology company that develops, manufactures, markets, and distributes vacuum, pressure and temperature measuring equipment for industrial and scientific applications worldwide. Our products are designed, engineered, and manufactured in Denmark to the highest quality standards. Our mission is to continuously endeavor to provide customer centric state-of-the-art measurement solutions.

Our passion | Your value™

