Sens4 A/S

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History and background

- Founded in 2017 by Ole Wenzel after a 14-year career at MKS Instruments, serving as managing director with responsibility for R&D and business development of the MKS 900 Series vacuum gauging.
- Experienced team with broad vacuum technology and application knowledge.



Products and services

«ISENS⁴

Vacuum

- 1•10⁻⁶ to 1000 mbar
- MEMS Pirani and diaphragm sensor
- 0-10 VDC output
- 4-20 mA output
- Digital interface
- Setpoint relay
- User configurable

Pressure

- 0 to 50 bar
- Absolute and gauge
- Ceramic & stainless-
- steel sensors
- 0-10 VDC output
- 4-20 mA output
- Setpoint relay
- User configurable

Temperature

- -50 to 150 °C
- MEMS sensor
- 0-10 VDC output
- 4-20 mA output
- Setpoint relay
- User configurable

Data management

- Datalogging
- Presentation
- Analysis
- Predictive maintenance
- Quality control
- Remote access









MSENS⁴

SmartPirani[™] vacuum transducer

Advantages and strengths

- Ultra-wide range from 1•10⁻⁶ to 1333 mbar.
- Unmatched measurement performance
- Analog and digital outputs
- Solid-state setpoint control output
- User configurable through USB converter

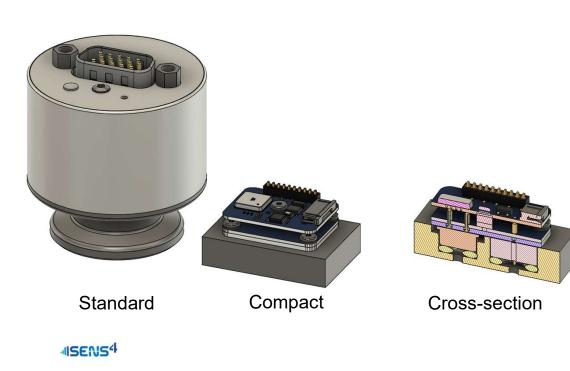




Customized solutions

Compact sensor with digital interface

- Small footprint
- Easy integration into equipment
- User configurable
- Private branding possible



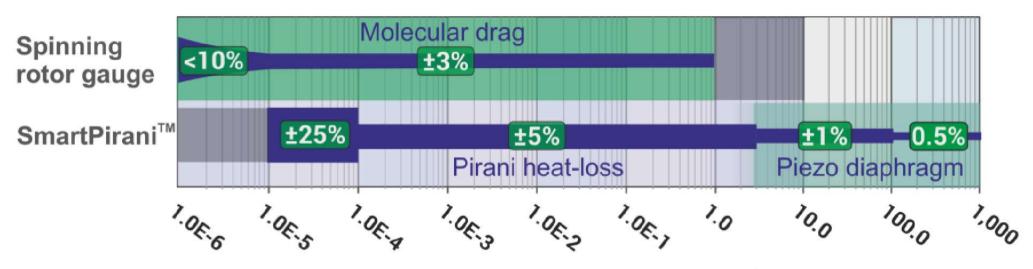
VIM-1 Spinning rotor gauge

Advantages and strengths

- Excellent long-term stability •
- Digital RS-232 or RS-485 interface
- Corrosion resistant sensor
- Bakeable all-metal sensor design
- Low-cost disposable sensor
- Passive sensor without ion- or heat source



Measurement range and accuracy



Measurement range in mbar and accuracy of reading

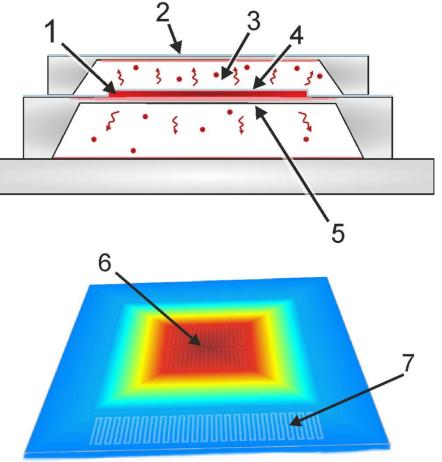
«ISENS⁴



SmartPirani[™] technology

MEMS sensor design

- **1.** Nickel resistive element
- 2. Silicon top cover
- 3. Measurement cavity
- 4. Silicon Nitride protective coating
- 5. Silicon Nitride diaphragm
- 6. Hot resistive element
- 7. Temperature compensation resistive element



ISENS4

SRG Technology

- 1. Sensing ball levitation coil
- 2. Sensing ball element
- 3. Sensor tube
- 4. Rotation driving coil
- 5. Permanent magnet
- 6. Measurement coil
- 7. Damping coil
- 8. Vacuum flange

