

company

case study

Kjaerulf Pedersen Partner with a Main Engine Manufacturer

This main engine maker, is a global leader in heavy machinery and engine manufacturing, partnered with us to co-develop a cutting-edge temperature sensing solution. Their goal was clear: to enhance preventive maintenance capabilities by gaining deeper insights into airflow and temperature conditions within engine rooms—especially in demanding marine and industrial environments.



The challenge

Engine rooms in marine and industrial settings are complex, high-heat environments where even small temperature anomalies can indicate the onset of mechanical issues. Main engine maker sought a robust, multi-point sensing solution that would deliver:

- Real-time temperature data
- Reliable airflow monitoring
- Seamless integration with existing monitoring systems
- A rugged design suitable for harsh environments

Temperature

Time



Solutions

Together with main engine maker's engineering team, we developed the TempMux-8 Multipoint Temperature Sensor. Purpose-built for advanced diagnostics, the TempMux-8 supports:

- 8x PT1000 sensor inputs for accurate multi-point temperature measurement
- Modbus RTU communication for easy integration with industrial control systems
- Compact, rugged design suitable for engine room conditions
- Airflow monitoring via strategic sensor placement, enabling early detection of blocked vents or overheating zones

The modular sensor array makes it easy to monitor various locations within the engine compartment, providing a comprehensive temperature map in real-time.

