

Application brief

Condition monitoring and predictive maintenance for smart buildings

Failures of devices inside a building can lead to severe operational disruptions, resulting in higher costs and discomfort for its occupants. With predictive maintenance, this can be avoided in truly smart buildings. Predictive maintenance is a data-enabled maintenance scheme. It monitors the condition of equipment in real time and schedules maintenance before failures happen.



Infineon products

Infineon offers a broad range of accurate sensors, microcontrollers for data processing, highly efficient power semiconductor solutions, and embedded security ICs.

MEMS mircophone	Pressure sensors	Environmental sensors	3D radar sensors	3D ToF sensors
PBA	Smart ears, smart fee	ling, smart nose	Smart eyes and sixth sense	
Magnetic and current sensors	Connectivity and RF solutions	Mircocontrollers	Embedded security solutions	Power IC solutions

Infineon's offering for condition monitoring and predictive maintenance

Infineon's portfolio of accurate **sensor products and microcontrollers** enables condition monitoring and predictive maintenance in a variety of applications including **HVACR equipment**. Additionally, Infineon has a long tradition in offering innovative intelligent power modules for motor drives in air conditioning.

	XENSIV™ Barometric Pressure Sensor DPS368	Air flow measurement at filter
C Interna Contraction	XENSIV™ Magnetic Current Sensor TLI4971	Current measurement at fan and compressor
A STATE	XENSIV™ 3D Magnetic Sensor TLI493D-A2B6	Position monitoring of components
and the second sec	XENSIV™ Hall Sensor TLE4964-3M	Open/close lid detection
	XENSIV™ Double Hall Sensor TLI4966G	Speed and direction monitoring of components
	XENSIV™ Linear Hall Sensor TLE4997E2	Vibration monitoring of components
	XENSIV™ Industrial Radar Sensor BGT24LTR11	Touchless position, vibration and overall device monitoring
	XENSIV™ 360° Angle Sensor TLI5012B E1000	Position detection of rotating component
	XENSIV™ MEMS Microphone IM69D130	Noise and sound monitoring at motor and compressor
	32-bit XMC™ Industrial Micro- controller XMC4700/XMC4800	Data processing and Wi-Fi connectivity management – FreeRTOS-qualified
	OPTIGA™ Trust M	Secured cloud enrollment, encryption and authentication

For further information, visit www.infineon.com/predictivemaintenance or contact us directly Julia Fichte: julia.fichte@infineon.com Manuel Hollfelder: manuel.hollfelder@infineon.com

Published by Infineon Technologies AG 81726 Munich, Germany

© 2020 Infineon Technologies AG. All Rights Reserved.

Please note!

This Document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

We reserve the right to change this document and/or the information given herein at any time.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any lifeendangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.