Ionix’s sensing system the world’s most demanding industries rely on – HotSense – receives a King’s Award for Enterprise for Innovation.

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Leeds-based deep technology company Ionix, recognised for breakthrough advanced materials sensing platform enabling continuous, high-temperature, sensing, measurement & monitoring across critical industrial infrastructure.

Leeds, UK - 6 May 2026

Ionix Advanced Technologies Ltd, the UK-based, global leader in extreme-environment piezoelectric sensing, measurement and monitoring technology today announced it has been honoured with **His Majesty The King's Award for Enterprise: Innovation 2026**, the United Kingdom's highest official business accolade. The Award recognises Ionix's development of the **HotSense** sensor platform and proprietary **HPZ** high-performance piezoelectric materials, which together enable continuous, real-time ultrasonic sensing, measurements and monitoring at temperatures from -200 to +600 °C, at high pressures, and in explosive and radioactive atmospheres, where conventional sensor technologies are defeated.

> *"Receiving the King's Award for Enterprise is a defining moment for everyone at Ionix. This recognition reflects years of advanced materials research, relentless engineering, and a clear commercial conviction to improve the resilience and operational efficiency of the world's critical infrastructure with functional materials sensing technology. We are proud to receive this honour as we continue to expand HotSense deployments across energy, petrochemical and industrial sectors globally."* — Tim Stevenson, Chief Executive Officer.

The Innovation: HotSense and HPZ technology

Unlike conventional measurement and inspection methods that require plant shutdowns, access to scaffolding, or temporary instrumentation, HotSense sensors operate continuously in-service. Deployed by remotely operated or robotic platforms, by hand, or fixed point installation, HotSense delivers real-time process control or structural health data, enabling on-stream process optimisation & operational efficiency, and increased resilience to ageing plant with extended asset life and reduced unplanned outages, respectively. The sensing technology is strategically positioned for rapid integration with mature OEM products, making HotSense an embedded choice for both system providers and end users, deployed globally across the oil and gas, power generation, and industrial process sectors, with leading instrumentation providers and plant operators.

Converting electrical impulses to mechanical movement or sound, and vice versa, piezoelectric materials are found in a wide variety of applications including medical ultrasound, naval SONAR, and parking sensors. Ionix’s **HPZ** piezoelectric ceramic is a novel material designed to maintain electro-mechanical performance under extreme conditions.

The patented HPZ material powers the Ionix **HotSense** platform for reliable, continuous ultrasonic sensing applications, including corrosion monitoring, level sensing, gas flow metering, and crack detection in harsh environments.

Ionix's innovative HPZ materials have additionally been adopted by major industrial measurement and control providers requiring high-performance piezoelectric components for specialist applications, establishing Ionix as a critical materials supplier alongside its sensor systems business.

Alongside HotSense, Ionix has recently launched TRND, an intelligent monitoring system which extends the platform into a turn-key precision corrosion and erosion monitoring solution, broadening the company’s addressable market. Ionix has also developed the XLF family of lead-free piezoelectric materials, further expanding the technology portfolio, to meet tightening global regulations while enabling OEM adoption in markets where conventional lead-based materials are restricted. Together, HPZ, HotSense, TRND, and XLF represent proprietary, high-performance technology platforms addressing multiple industrial monitoring, measurement and sensing requirements.

How the King’s Award will drive future innovation.

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Ionix's recognition with The King's Award for Enterprise for Innovation, marks a significant milestone in the journey from materials spin-out of the University of Leeds in 2011. It celebrates the Company values, dedication to innovation and the hard work of the entire team.

As Ionix continues to grow and strengthen its influence in global markets, it remains committed to fostering innovation at home, in West Yorkshire. Our team, drawn from local talent with global ambition, is dedicated to developing technologies that make extreme environments safer, smarter, and intelligent.

This commitment is demonstrated by the recent inauguration of our centre of excellence for extreme environment sensing and the ongoing expansion of our advanced materials manufacturing facilities in Leeds, providing opportunities for new innovation, skills and supply chain in the region and nationally. During her recent visit, Chancellor Rachel Reeves remarked, "businesses like Ionix showcase the great potential that Britain has to lead in sectors such as advanced manufacturing".

Market context and growth trajectory

The global market for structural health monitoring and corrosion management is experiencing rapid growth, driven by regulatory tightening, aging infrastructure, and the rising cost of unplanned industrial outages. HotSense addresses a gap no commercially available technology has previously filled: continuous, quantitative wall-thickness data from sensors that survive the most most-demanding process environments indefinitely.

Mature technology, with active engagements throughout the United Kingdom, continental Europe, North America, and the Middle East, Ionix is positioned to scale HotSense integrations into advancing small modular reactor build-outs, emerging hydrogen infrastructure and next-generation battery storage technologies worldwide.

About The King's Award for Enterprise

Established in 1965 and presented annually on His Majesty The King's Birthday, the King's Award for Enterprise is the UK's most prestigious business award. Now in its 60th year, organisations recognised for Innovation must demonstrate outstanding commercial success arising from an innovative product, service, or business process. Ionix will hold the Award for five years and is entitled to use the emblem, as a globally recognised mark of excellence.

About Ionix Advanced Technologies

Ionix Advanced Technologies Ltd incorporated as a University of Leeds spin-out headquartered in Leeds, UK. The company specialises in piezoelectric sensing technology for extreme environments across four product and materials platforms: HotSense (extreme-environment ultrasonic sensors), **TRND** (wireless, intelligent, remote, condition monitoring system), **HPZ** (high-performance piezoelectric ceramics, the key enabler or extreme environment applications), and **XLF** (lead-free piezoelectric materials for global industrial OEMs futureproofing for incoming legislation). Ionix serves customers across oil and gas, nuclear, power generation, petrochemical, aerospace, and heavy industry markets globally.

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