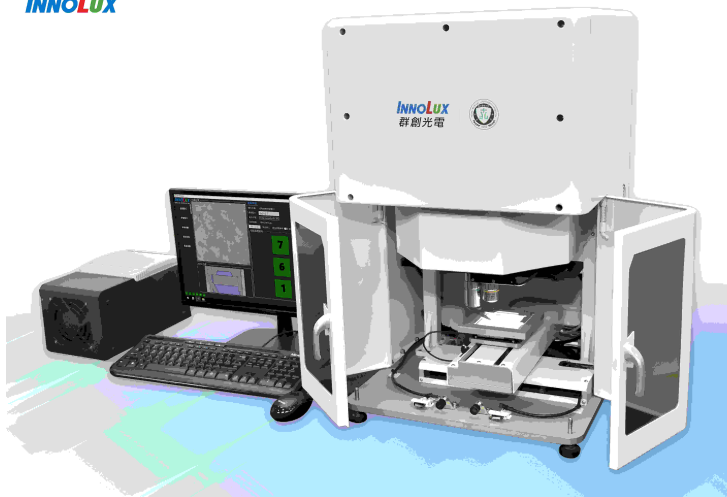


## InnoCare Optoelectronics Drives New Thinking in AI and Ventures into Innovative Smart Healthcare Applications

09 December 2022 | News

**Seizing opportunities to offer innovative and diverse solutions for human healthcare, mobile healthcare, and pet healthcare**

**InnoLUX**



InnoLUX subsidiary InnoCare Optoelectronics has been developing digital X-ray flat panel detectors for many years and proactively ventures into smart and precision healthcare. InnoCare will participate in Healthcare+ Expo Taiwan 2022 from December 1 to December 4. With **Alming for Precision** as the theme, InnoCare will combine AI-assisted diagnosis and digital X-ray detection applications with healthcare to showcase a series of software and hardware integrated solutions for smart and precision healthcare that are accurate and reliable. This includes solutions for human healthcare, mobile healthcare, and pet healthcare, which strengthen the implementation of application requirements. The endeavor represents InnoCare's commitment in building a comprehensive smart healthcare ecosystem.

James Yang, Chairman of InnoCare Optoelectronics, said, "The aging world population has been accelerating the development of healthcare technologies in recent years. Of which, AI-assisted diagnosis, precision healthcare, and telehealth are the main development opportunities. InnoCare has taken on an important responsibility. With digital X-ray flat panel detectors as our development foundation, we continue to deepen our forward-looking technologies and innovative products and work together with healthcare partners in the industry, government, and academia to create innovative smart and precision healthcare applications. We endeavor to protect the health and well-being of the people and pets of our country and fully realize our environmental, social, and corporate governance (ESG) responsibilities."

## **Cross-domain integration of AI and healthcare ignites a new spark in smart healthcare**

According to the research firm Forst & Sullivan, the global digital healthcare market reached US\$178.4 billion in 2021 and is estimated to reach a compound annual growth rate of 15.2% from 2021 to 2026. Eyeing on the digital transformation in the global healthcare industry, InnoCare aims to make full use of opportunities in smart and precision healthcare, focusing on multidisciplinary applications and solutions. For human healthcare solutions, InnoCare collaborates with major medical centers and strategic partners to showcase solutions that include the first *X-ray Hip fracture detection system* that can help clinicians to quickly and accurately diagnose hip fractures and prevent overlooking of fractures through a deep neural network AI model and InnoCare's X-ray image analysis software.

Moreover, InnoCare will showcase two major technologies and products, i.e. industry-leading IGZO TFT sensor substrates and flexible substrates. InnoCare's IGZO TFT sensor substrates feature high electron mobility and extremely low leakage current. Both of which translate into high speed, low noise, and low latency advantages that can speed up dynamic scanning to effectively reduce artifacts caused by latency of 3D reconstruction, thereby achieving fast photography performance to provide clear and precise images. This technology has already been recognized and adopted by flat panel leaders worldwide for cone beam computed tomography (CBCT) scanning used in dentistry, dynamic photography in gastrointestinal and orthopedic surgery, fluoroscopy, industrial applications, and more. Due to their lightweight and drop resistant characteristics, flexible substrates and modules can better suit mobile X-ray inspection systems.

For mobile healthcare solutions, InnoCare will showcase the *Portable X-Ray Solution*, which pairs exclusive flexible substrate X-ray flat panel detectors and portable mobile x-ray machines (Energy Resources International Co., Ltd.) with workstations and tripods, etc. to form a high-performance inspection solution that is not limited by the time and place. This solution fits the mobility, lightweight, drop resistance, high resolution, and 5G smart connectivity requirements of digital X-ray devices to support telehealth.

## **InnoCare's AI precision healthcare protects the health of pets**

The pet economy has been booming in recent years. Global Information (GII) predicts that the growth of the global pet care market to reach US\$58.96 million between 2022 and 2026. For pet healthcare solutions, InnoCare will launch Taiwan's first *veterinary community cloud platform*, *Vetical*, at the expo. Vetical is a social, treatment process, AI-assisted and learning platform designed specially for veterinarians with a goal of creating an intelligent big data pet healthcare platform in Taiwan. Meanwhile, InnoCare has been deeply involved in campus collaborations for many years and will showcase *Cat X-ray Image vertebral Heart Score AI System* through an industry-academia collaboration with the National Pingtung University of Science and Technology. Combined with InnoCare's digital X-ray detectors and deep neural network AI models, it can quickly and accurately detect lesions in pets within 10 seconds. The early detection thus enables early treatment of diseases to protect the health of pets.