

PET/CT uMI 780 Installation at the Osijek Clinical Hospital Centre in Croatia



We are pleased to announce that the number of comprehensive treatment centres in Europe relying on United Imaging Healthcare's advanced digital imaging technology continues to grow. UIH is expanding in Europe with the addition of a new high-end digital PET/CT at the Osijek Clinical Hospital Centre in Croatia.

Following a partnership with our business partner, Shimadzu Croatia, the <u>UIH Europe</u> team is proud to share another success story: the recent installation of a high-end <u>uMI 780 digital PET/CT</u> equipped with TOF technology at the Osijek Clinical Hospital Centre.

The Osijek Clinical Hospital Centre is the largest public hospital in eastern Croatia, with a rich tradition of medical excellence dating back to the first half of the 18th century. Over the years, it has developed into a world-class medical centre with a strong focus on education and research. It also takes an active role in organising campaigns to raise public awareness of diagnostics and promote screening.

To achieve its ambitious goal of meeting the healthcare needs of the region, the hospital has expanded to include a multitude of highly specialised departments and is like a city with up to five thousand people passing through its corridors every day.

In its quest to provide the highest quality medical services, the Osijek Clinical Hospital Centre is strongly committed to the use of state-of-the-art medical equipment. As part of this ambitious endeavour, the hospital has chosen the best technology – the next generation uMl 780 digital PET/CT — to provide its patients with world-class PET/CT imaging services. The uMl 780 scanner utilizes TOF technology and is equipped with the industry's finest size LYSO, which is coupled to a digital SiPM detector via an integrated light guide. The system includes a 160-slice CT scanner with an isotropic resolution of 0.25 mm, integrated with an innovative Z-detector technology. Reflecting United Imaging's unwavering commitment to technical excellence, the uMl 780 is equipped with an extra-large 30 cm field of view coverage. This ultra-fast, high-resolution system offers unparalleled quality in PET/CT imaging while meeting the needs of a high-throughput treatment centre.



A number of innovative engineering solutions have been introduced to ensure unparalleled diagnostic accuracy. The integrated light guide significantly improves light collection efficiency and spatial resolution, while the SiPM technology increases photoelectric conversion efficiency to reduce signal loss, resulting in excellent image quality. Also contributing to the uMI 780's impressive performance is its high-precision crystal, which greatly enhances image resolution. Seamlessly integrating these powerful features, the advanced uMI 780 system boasts outstanding specifications, including an industry leading NEMA resolution of 2.9 mm and sensitivity of 16 cps/kBq. As a result, the uMI 780 is set to deliver a revolutionary breakthrough in the clarity, sensitivity, coverage and speed of PET/CT imaging. In addition, the uMI 780's large image matrix enables unprecedented visualisation of fine image detail, helping nuclear medicine physicians and radiologists to diagnose even the most complex pathologies. Importantly, the system allows for a reduction in the amount of radiopharmaceutical injected, significantly reducing radiation exposure without compromising the overall quality of PET/CT imaging.

The uMI 780 has been specifically designed to meet the evolving needs and requirements of a dynamic treatment centre where countless patients undergo molecular imaging diagnosis every day. The highly modular design underpins the remarkable reliability and serviceability of the system, enabling the uMI 780 to withstand intensive daily use.

United Imaging Healthcare's global mission is to improve patient diagnosis and treatment through access to advanced digital imaging technology. One way to achieve this goal is to ensure a short scan time, so that more patients have the opportunity to undergo PET/CT scanning. Thanks to the considerable efforts of the UIH research and development team, the uMI 780's state-of-the-art digital technology can complete a full-body PET/CT scan in 5 to 6 minutes. In addition, the ultra-large axial field of view allows this PET/CT system to image the largest organ in the human body – the lung – in a single bed position, enabling comprehensive imaging of entire organs or body regions. Finally, the uMI 780 offers three bed positions for a faster and more efficient imaging workflow, ultimately leading to shorter examination times and increased patient throughput.

At United Imaging Healthcare, we are committed to improving patient access to advanced imaging modalities, and the installation of the uMI 780 system at the Osijek Clinical Hospital Centre is a testament to this commitment.

We would like to thank the Osijek Clinical Hospital Centre for choosing United Imaging and our business partner, Shimadzu Croatia, for making this collaboration possible. We are confident that our technology will improve the lives of countless patients. Together, we are actively shaping the future of healthcare.

Source & Image Credit: United Imaging

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