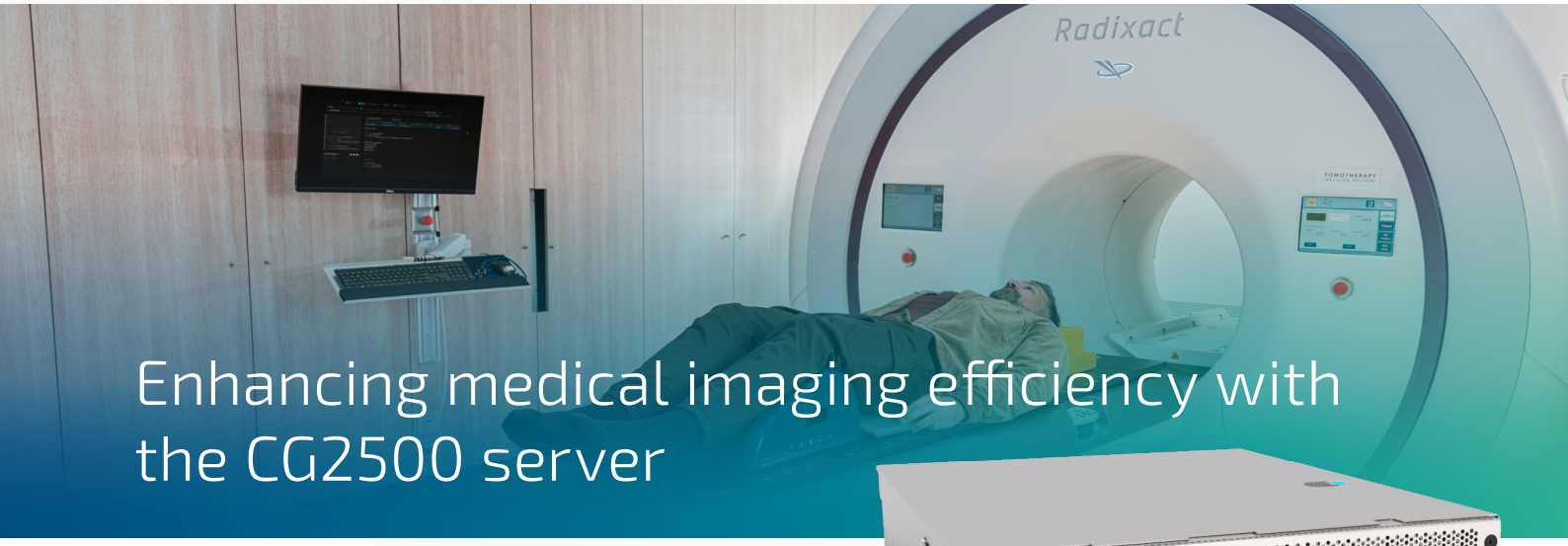

Enhancing medical imaging efficiency with the CG2500 server

NEEDS AND CHALLENGES

- **Dense data processing:** An efficient system for medical professionals to gather, store, share, analyze large volumes of images from various imaging modalities like CT scans, MRIs, ultrasounds, and X-rays, enabling DICOM compliancy for communications with PACS systems.
- **Support for multiple specialized I/O cards:** Scalability and resource optimization to enable simultaneous computations required by imaging applications.
- **Compact footprint:** A compact server that can fit into small spaces such as within the machine without compromising performance.
- **Low-noise operation:** A low-noise server that operates within a safe noise level, ensuring that medical professionals can work close to the equipment without risking their or patients' hearing.
- **Secure system management:** The system must ensure that the data and software are intact and have not been tampered with, maintaining the integrity of the imaging process and accuracy of the results.
- **Support for demanding conditions:** Equipment that can be installed in an area with limited airflow and space within settings that might influence the reliability of operations.
- **Long product lifecycle:** Equipment designed for extended production lifecycles, reducing the need for frequent recertifications, and minimizing component changes.

BENEFITS OF THE CG2500

- **High-performance data processing:** Advanced server-class processors, enhanced memory and storage capacity allow bleeding edge add-on I/O cards such as GPUs and FPGAs.
- **Highly integrated platform:** Support for multiple add-on I/O cards such as GPUs and FPGAs to enable effective management, parallelization and synchronization of critical data.
- **Small form factor:** 2RU with a short depth of 20" and 19" wide chassis built for medical lab settings where space is limited.
- **Low-noise design:** Its enclosure, fan management and thermal solution are designed to meet low-noise requirements where close human interaction is essential.
- **Advanced cybersecurity measures:** Features like secure boot, TPM, and encryption capabilities ensure the protection of data throughout the sequencing process, maintaining the confidentiality and integrity of sensitive information.
- **Built for demanding conditions:** The server's ability to operate within a wide temperature range and resist environmental fluctuations ensures reliable performance even in less-than-ideal operating conditions.
- **Extended server life:** The server's long manufacturing availability (7 to 10 years) and BOM control ensure product stability, supporting ongoing research and future advancements in medical imaging.