



MEDICAL TECHNOLOGY

APPLICATION EXAMPLE

## Control computer for radiotherapy (cancer treatment)

HEITEC is supporting a leading provider of medical technology products with the integration of industrial computers for the customer's end application. The linear accelerator is used for radiotherapy in cancer treatment. The medical computer serves as the control panel for the entire system. The control panel controls and monitors all the functions of the linear accelerator. The radiologist's or oncologist's radiation plans are technically implemented in the system and all safety functions are guaranteed. All information and data from the linear accelerator are collected in the medical PC and can thus be monitored in real time.

But HEITEC's contribution of these system solutions doesn't end with the mere provision of hardware: Based on special logistics services, HEITEC offers the customer long-term supply capability and product stability. In its development and production, HEITEC consistently implements all the restrictive processes applicable in medical technology. Developments for medical products are based on the IEC/UL 60601-1 and IEC/UL 60601-1-2 standards. These standards

apply to quality and risk management as well as safety, including essential features and the lifecycle processes of medical electrical equipment. And not just product design – generally medical equipment must continue to be operational over many years. This means that lifecycle management must be designed for the long term.

In terms of technology, HEITEC optimized the existing baseboard for the COM Express® Type 2 module for EMC requirements and supported the customer for the certification tests. All the included modules were assembled and tested in-house. As an enclosure, a customer-specific 19" IPC housing is used that is produced according to specifications. A strip of colored glass in the customer's corporate design is inlaid in the foldable aluminum front panel as a visual highlight. To ensure complete and thorough testing of the computer, a test rack was developed in collaboration with the customer and put into operation, and the whole production documentation was reworked and updated.

## Innovative System Solution



View of the open and custom designed front, top without cover



Rear view of the system with customer specific cut-outs for required interfaces

## Technical Summary

- › Customer specific industrial PC enclosure
- › W x D: 19" x 4U
- › Baseboard for COM Express® Type 2 plug-in module
- › COM Express® Type 2 Intel® Celeron® module
- › SSD: 256 GB
- › 2 GB DDR3 RAM

## Customer Benefits

- › Implementation of customer specific enclosure
- › Support for EMC optimization
- › Support for certification tests
- › Support for customer's product lifecycle
- › Long-term availability and product stability

## HEITEC AG

Dr.-Otto-Leich-Str. 16  
90542 Eckental, Germany

Phone: +49 9126 2934 0

Fax: +49 9126 2934 199

e-mail: [electronics@heitec.de](mailto:electronics@heitec.de)

Web: [www.heitec-eps.com](http://www.heitec-eps.com)