

Healthcare Case Study



Radon Bring Modern X-Ray Tech To Rural Areas with Cybernet



Radon Medical Imaging is a 3rd party medical imaging company based in West Virginia that installs, services and maintains X-Ray machines. Serving a number of hospitals and facilities in rural areas, Radon faced a number of challenges in helping their clients move away from analog and into the digital space.

Radon Medical Imaging Corp.

Industry: Healthcare

Product: CyberMed NB22

HQ: Ona, WV

Challenge

Radon Imaging needed a mobile X-Ray solution to help their clients in rural areas transition to a digital format without the need to upgrade all of their imaging equipment. This presented a number of challenges. Radon needed a VESA Mountable all-in-one PC with enough battery life to get through a long day of serving patients. The PC also needed to integrate with their mobile X-Ray units without altering the design of the machine itself in order to remain FDA compliant. The medical PC needed to have sufficient serial (RS232) ports, enough RAM to run imaging software, both Windows 7 and Windows 10 boot options, multiple network cards, and it needed to be scalable to fit a range of medical imaging needs.

In the past, they used consumer-grade Dell all in one PCs; however, those PCs didn't meet the demands for medical equipment. The units weren't VESA mountable, lacked the battery life needed and couldn't be properly integrated without altering the design of the X-Ray machine, causing FDA compliance issues.



The vast selection of Cybernet PCs available was narrowed down to a specific Cybernet solution: the CyberMed NB22. Radon had specific technical specifications that needed to be met in order to pair older legacy machinery with modern imaging computers. The serial ports on the CyberMed NB22 were exactly what was needed to properly interface with the X-Ray machines. And the VESA mount option made it the perfect solution. The hot swap batteries were also an important piece of the puzzle. Because the CyberMed NB22 is powered by its own batteries, it facilitated the ability for technicians to wheel the mobile X-Ray units from room to room without needing to constantly plug and unplug the units.



Results

The CyberMed NB22 was the perfect solution for Radon. It saved them considerable time and money since the X-Ray machine required little configuration due to the serial ports on the NB22. The three hot swappable batteries allowed medical staff to take the NB22 from room to room without downtime, and the NB22 even charged while plugged into the X-Ray machine.

All of Cybernet's medical cart computers have a 3-5 year life cycle so there isn't variation in hardware that could potentially cause compatibility problems. The 3-5 year life cycle was a tremendous bonus for Radon, reducing their frustration and stress levels from using consumergrade PCs in the past.

With its large screen size, the VESA mountability, and the necessary serial ports, the NB22 was the perfect solution. They are considering upgrading to the CyberMed NB24 and desire a product line of 27" touchscreen medical monitors for use on their next imaging devices.

The feedback they've received from their clients has been overwhelmingly positive. Clients cite the ease of use, mobility and battery life of the units as features that make their daily tasks easier to perform and more efficient. Not only that, but the units have provided a cost-effective way for their clients to provide more advanced technological services to their patients without having to replace their current machinery.

The battery life of the [CyberMed NB22] is tremendous. We left it running and unplugged all night for around 13 hours and it still had 20 to 40 percent of its battery life left!

- M.D., IT Engineer Radon Medical Imaging

