

Case Study

US Vascular:

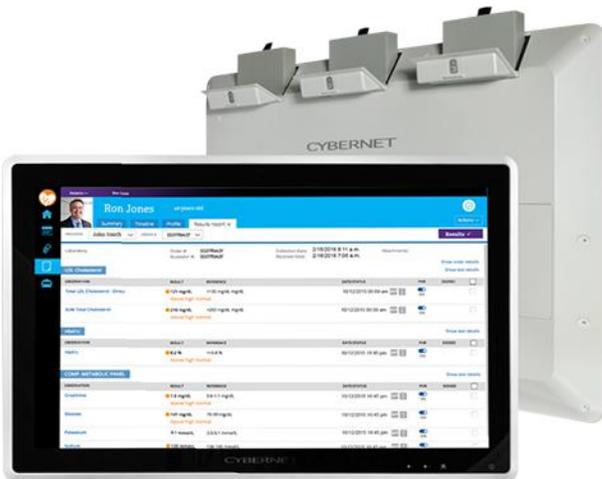
US Vascular is a medical device manufacturer that was established in 2013. They manufacture a device called VascuLab that examines the circulation of blood vessels in the body for Peripheral Arterial Disease. Located in Beaverton, Oregon, their solution combines a medical cart, medical computer, and their VascuLab device coupled with their proprietary software to customers nationwide.



VASCU LAB
MADE BY US VASCULAR

The Challenge:

When US Vascular first began shipping the VascuLab solution to its customers, they were using consumer-grade computers. This presented a number of issues. The retail computers had no sealed front bezel to facilitate easy cleaning, nor did they have 60601-1 medical certification for near-patient use. The company was forced to use isolation transformers to plug the computers into just to maintain patient electrical safety standards. In addition, due to the rapid technology advances in commercial grade computers, their computers were already obsolete by the time the device was certified by the FDA. US Vascular elected to switch to a medical grade computer, initially going with one of Cybernet's competitors. The competitors models were running older processors, which made them sluggish and their cooling fans were loud and unclean. US Vascular needed a powerful medical grade computer with hot swap battery technology in order for their units to run as intended.



The Solution:

US Vascular reached out to Cybernet to ask about the CyberMed NB24 model. The CyberMed NB24 was a generation ahead, with a newer Intel 6th generation Skylake processor and a blazing fast industrial grade Solid State drive. It worked perfectly with their VascuLab carts, and because it was certified EN60601-1 for near patient use, it eliminated the need to use isolation transformers to stay FDA compliant. The CyberMed NB24 was also easier to clean than the retail computers, had lengthy battery life, and mounted perfectly on the medical carts they were using.

“ By the time you pick [a consumer-grade computer] and test it, it’ll be obsolete before you ever get it to market. You can’t validate the IT equipment. It’s impossible.”



The Result:

US Vascular are extremely happy with the CyberMed NB24. The hot swap battery feature is an extremely important feature. Customers can take the unit from room to room to do their testing and get through an entire day's shift. The IP65 rating also allows for easy disinfecting of the unit. When it comes to onboarding a new customer, US Vascular uses the dual Ethernet card to connect with their medical device as it operates in a "plug-and-play" mode, saving them time and making set up a much more user-friendly experience. The CyberMed NB24 has been in the field for approximately 6 months with no hardware incidents to date, and the team at US Vascular is already planning on using Cybernet products on future projects.