



Smart

The PD-9024G is backward compatible and safe to use with any 802.3af terminal such as VoIP phones, IP cameras and WLAN access points.



Connected

Our PD-9024G midspan offers an IEEE 802.3at-compliant solution to power IEEE 802.11n and IEEE 802.3at access points.



Secure

For secure remote management, our PD-9024G PoE midspans include the PowerView Pro management platform.



Gigabit Midspans Serve UMC Utrecht's Wireless Ambitions

Vosko Upgrades Existing Infrastructure With PoE+ to Build a Robust Wireless Healthcare Network

Healthcare organizations are often at the forefront of technology adoption. Their mission keeps medical staff and network administrators focused on the most positive outcomes for those in their care and technology advances that allow them to perform at a high level are given top consideration. Access to electronic medical records (EMRs), ultra high-definition medical imaging, video streaming and remote telehealth offerings continually push the boundaries for healthcare WLANs. Patients, doctors, nurses, clinicians and support staff are always on the move and ubiquitous campus coverage is a requirement for next-gen applications to deliver their true value.



Among the compelling use cases for modern wireless networks in hospitals are real-time locating systems (RTLS) which allow admins to locate people, wheelchairs, infusion pumps, health monitors and a wide variety of tagged healthcare assets within a facility. Wearable Wi-Fi voice devices allow private caregiver communication networks to support nurses and they make their rounds. Secure, automated prescription-filling apps allow for the on-premise distribution of medicines. Bedside monitoring systems can travel with patients as they move within the facility. Each upgrade in wireless throughput keeps pace with a wide spectrum of high-bandwidth applications that are developed each year.


Wireless networks have been deployed in hospitals for decades now, but they haven't necessarily rolled out with the same ease of integration found in the corporate world. Every evolutionary upgrade in the 802.11 Wi-Fi standard brings greater speeds, reliability, security, connectivity and manageability. For those architecting next-generation wireless networks in hospitals, the path from evaluation to installation requires a great deal of scrutiny.



Working with Enterprise IT Innovators

With systems integration success spanning several decades, Dutch IT specialist Vosko B.V. earned a solid reputation for providing enterprise networking, unified communications, security, data center and managed services throughout the Netherlands. From its headquarters in Gouda, in the province of South Holland, Vosko established itself as a trusted provider that served large and complex infrastructure networks and built an enviable presence in the healthcare, government and higher education sectors. Today, the organization is part of a much larger European systems integration footprint after being acquired by Conscia A/S.

Conscia is a leading provider of secure and reliable IT infrastructure with an emphasis in cybersecurity, data center and cloud implementations, networking and wireless deployments and digital workspace applications. Headquartered in Denmark, the company's presence extends across Germany, Norway, the Netherlands, Slovenia, and Sweden.



The Major Incident Hospital is a distinguished facility within UMC Utrecht charged with providing immediate emergency care in exceptional circumstances.

World Class Care from a Multi-Tiered Healthcare Leader

One of Vokso's signature customers, University Medical Center Utrecht (UMC Utrecht), approached them to architect a robust, high-availability wireless network to support their business-critical applications.

UMC Utrecht is one of the largest public health care institutions in the Netherlands with a team of nearly 12,000 employees. As an academic hospital, the organization consists of University Medical Center (UMC), the Wilhelmina Children's Hospital (WKZ) and the Medical Faculty, University of Utrecht. Their mission is to continually build upon a foundation of delivering first class care while encouraging and supporting collaboration across all areas of the organization to produce the best outcomes for staff, students, and patients.

The Major Incident Hospital is another distinguished facility within UMC Utrecht charged with providing immediate emergency care in exceptional circumstances. It is the result of cooperation between the Ministry of Defense's Central Military Hospital and the UMC Utrecht. The combined resources of a large academic medical institution, a military hospital, a trauma centre and the National Poison and Control Centre (NVIC) enable the Major Incident Hospital to feature a first-class infrastructure along with the expertise required to provide emergency care during the most extreme conditions.

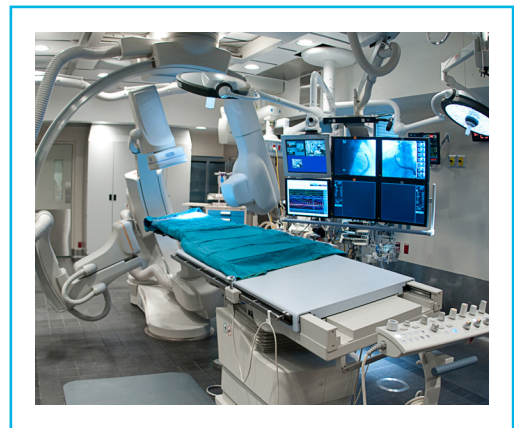
The Challenge

To serve the evolutionary needs of its stakeholders, UMC Utrecht administrators recognized that their existing architecture could not deliver the power required to enable full functionality of the new wireless network that they envisioned.

To meet the growing demand for connected devices in the hospital campus,

a newly-proposed network would need to efficiently and cost-effectively power thousands of new wireless access points across multiple buildings

within the UMC campus. To optimize ROI and keep within budgetary requirements, it was essential to leverage the existing switching infrastructure and avoid installation complexities.





The Solution

Vosko understood UMC Utrecht's mandate for a high-power solution that would both keep financial expenditures in check and ensuring a rapid turnaround time. They proposed to deploy PoE+ midspan technology and retain the existing Ethernet switches.

Our PoE Midspans were chosen to reliably power the high-power applications due to their unique features and ease-of-installation characteristics.

200 PD-9024G midspans were installed in multiple buildings throughout the campus powering more than 3000 wireless access points. The PD-9024G is backward compatible and safe to use with any 802.3af terminal such as VoIP phones, IP cameras and WLAN access points. With its plug-and-play installation, it was easily and cost-effectively implemented leveraging existing Ethernet infrastructure while at the same time providing the assurance of a future-proof network. For secure remote management, it includes the PowerView Pro management platform.

The unique features of our midspans were among the key drivers in their decision making:

- Enabling full-power per port on all ports concurrently, ensuring full and uninterrupted power supply
- Offering remote management capabilities and facilitating quick assessment of end-point issues and allowing remote reboot and power diagnosis
- Delivering plug-and-play installation
- Ensuring interoperability and compliance with industry technology and safety standards
- Offering ongoing support and limited-lifetime warranty

*“The (Microchip) power injectors
are very easy to deploy. The
product does exactly what it
promises to do!”*

UMC Utrecht Project Manager





The Result

The modernization upgrade to the UMC Utrecht wireless network has allowed medical professionals, research staff, visitors and patients to benefit from the robust characteristics of modern WLAN connectivity among the latest wireless devices and applications.

A significant cost reduction was achieved by leveraging existing infrastructure while at the same time transitioning

to PoE+ technology. Compatibility of Microchip Midspans with UMC Utrecht's existing infrastructure was key, while the simplicity of installation significantly reduced the cost and complexity of the technology upgrade. UMC Utrecht administrators were able to meet the high-bandwidth demand from connected devices throughout the campus resulting in improved business efficiency and reliability.