



## More than just on-call: NURSE CALL MASTER STATION

*How Response Care extended service quality with a robust all-in-one medical grade PC solution*

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### Introduction

According to a report published by Forbes, in the U.S. alone, baby boomers will reach 65 years of age at a rate of approximately 10,000 per day, every day for the next 20 years. Undoubtedly, such a drastic change in global population dynamics is set to present wide-ranging healthcare challenges as well as revenue opportunities.

To address these concerns, **Response Care**, a North American provider of nurse call

solutions for nursing homes and senior care facilities, launched a diverse range of communication systems designed to facilitate the provision of quality care.

Aiming to increase the quality of care, simplifying communication, and enhancing safety for patients at care facilities, Response Care selected the Advantech **HIT-W121B**, a medical grade all-in-one computer, as the hardware platform for their nurse call system.

## Optimized to Boost Staff Workflows and Productivity

Unlike traditional nurse call systems, the Response Care nurse call master station allows staff to monitor task fulfillment and optimize operational efficiency. Towards that goal, the [HIT-W121B](#) is built with pro-



jected capacitive touchscreen, which allows healthcare providers to easily mark calls for assistance as “received” to inform patients or care facility residents that they will be attended to soon. After providing assistance, caregivers can then log status to confirm task fulfillment. Using this system, care providers can ensure that every call is responded to, map operational processes, and optimize workflows.

Response Care’s nurse call software paired with Advantech’s nurse call hardware provides a turnkey solution. While functioning as a streamlined emergency call center in senior care facilities and nursing home settings, it also enables facility administrators to monitor the performance of each care professional. By reviewing period-over-period workflow reports, administrators can analyze key metrics such as

response time, action taken, and call prioritization in order to improve the speed of response, increase staff productivity, and ensure all seniors receive prompt and high value assistance.

## Streamlined Integration with EMR and EHR Systems

Advantech’s [HIT-W121B](#) medical grade UL 60601-1 certified computers can be integrated with existing electronic medical record (EMR) and electronic health record (EHR) systems to allow healthcare staff to easily access, share, and update patients’ medical records. It enables caregivers to identify a resident’s upcoming appointments. Furthermore, if an emergency occurs and residents must transfer from care center to hospital, physicians can have a clear overview of a patient’s health history, prior diagnostic results, and significant medical events.

Myron Kowal, President of Response Care, states that “One of the best benefits of the [HIT-W121B](#) is that it allows patients’ medical records to move with them.” For example, when seniors are transferred to hospitals or other care facilities, their medical records can be shared between organizations in real time. By providing access to EMR and EHR systems, [HIT-W121B](#) eliminates the difficulty of data management, data sharing, and minimizes error of patient information over paper-based charting systems.

## Provides a Reliable Communication Portal

Healthcare staff must be easily reachable at all times; an easy user interface and dependable connectivity are crucial features for patient care devices. Traditional wireless intercom systems only allow connections with patients throughout a facility using disparate communication methods and are often using a less interactive resistive touchscreen for generic markets. In comparison, the [HIT-W121B](#) features a projected capacitive touchscreen panel. It is also teamed with mobile network connectivity; thus it can be equipped with a handset, and can send SMS text or voice messages via wired or secure WiFi connections.

## Equipped with Power-over-Ethernet

For Response Care, the optional power-over-Ethernet (PoE) functionality offers added security, power savings, and reduces installation costs. As Kowal elaborates, "Browser-based control panels with extended functionality typically requires more than one cable to supply power and enable data communication." However, with the inclusion of PoE, the existing network infrastructure can be leveraged to provide device power and network connectivity with a single cable. This provides the [HIT-W121B](#) with an added layer of protection from unauthorized personnel attempting to obtain confidential patient information. The main advantage of PoE in the healthcare environment is through its ability to deliver power by only one input

source. Thus the network administrator can easily and remotely turn on or turn off the system through WAN or LAN. The [HIT-W121B](#) can therefore be widely deployed throughout facilities with minimal operational disruption and system downtime, and give healthcare providers better system manageability.

## Upcoming Trends

Based on over a decade's worth of experience in the elder care industry, Response Care projects that at-home elder care services will be one of the market's fastest growing segments. Instead of moving to assisted living facilities, an increasing number of post baby boomers will choose to remain in their own homes, where they feel more comfortable and are less stressed. Known as "aging in place", extending services to a person living in their own home independently as they age offers more choices to themselves and their families.

With increased demands for homecare, compact and multifunctional equipment will become essential in the future. Kowal emphasizes, "Offering multifunction bedside solutions in the home is going to be a large opportunity. The benefit is that Advantech solutions can be employed in both smaller settings, so we are considering it to meet the market requirements." Due to the compact fanless design of the [HIT-W121B](#), it can serve as an integrated smart home computer for managing the diverse aspects of a senior living space. Besides functioning as a clinical device for monitoring vital signs, the [HIT-W121B](#) can also function as a media entertainment hub and a communication center that

enhances quality of life for seniors. With the system's durability ratings, and the company's lineage in rugged and robust computing applications, the Advantech [HIT-W121B](#) becomes a smart choice as a reliable healthcare system. These factors come into play for future at-home requirements, where a quality system vastly reduces the likelihood of a system replacement in the home over the course of care.

For more information on Advantech Medical Computing Solutions, go to  
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