

Creating a Truly Mobile Pharmaceutical Workstation

Leveraging IoT technology
for the enterprise

Industry 4.0 is putting pressures on every sector to compete aggressively by accelerating their processes and advancing their core technologies to keep up with the competition. This creates a serious issue for resource-intensive fields like pharmaceutical research, development, and manufacturing. It is critical that every technology, every process, and every tool is leveraged to maximum performance capability.



Going Wireless

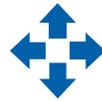
Arista has solved the problem with the introduction of an advanced, truly mobile workstation—the AMW-1321AX-E01 (Figure 1), an advanced, wireless, portable system that is powered by a compact heavy-duty battery allowing the mobile workstation to function seamlessly and in an uninterrupted fashion while in motion from point A to point B. That's full functionality throughout the process without the need for hard-wired access to power and communication sources.

The Arista AMW-1321AX-E01 has an internal heavy-duty, long-lasting battery that makes it completely mobile with no cables to be disconnected, managed, and reconnected, and with no break in any live and/or critical connections to reestablish, saving time and significantly increasing workplace productivity.

The AMW-1321AX-E01's heavy-duty battery allows it to last for several successive shifts before requiring a recharge, enabling full non-stop mobile operation over a 24-hour period. Then the battery can be recharged overnight to 100 percent capacity after last work shift is completed.

The workstation system continually monitors battery life and, if necessary to continue completing tasks beyond the 24-hour cycle, the recharging process can take place while operating the unit at a stationary location.

As a fully enclosed unit, the AMW-1321AX-E01 is fully compliant from a regulatory standpoint, and functions exceptionally well within sensitive pharmaceutical environments.



Mobility is Key

When it comes to large support systems like workstations, the ability to move the tool from one place to another maximizes its utility and reduces equipment redundancy. In addition, using mobile workstations enables rapid and easy reorganization of the work environment and process flow for more flexible management.

However, the problem with most mobile workstations is that they aren't truly "mobile." While they can be moved around from one place in a facility to another, they can't be used while in motion. They must be plugged into a power source at each location and wired for communication. Each time, all power and signal cables must be disconnected, rolled, and stowed, and then put away or transported with the units and then reconnected.



(figure 1)



Form Meets Function

A truly mobile, completely enclosed functional solution like the AMW-1321AX-E01 is highly useful and successful in many different parts of the pharmaceutical processing and manufacturing operations, but its sealed nature lends itself very well to the cleanroom area of the operations. Here, the workstation demonstrates its exceptional utility as it can function seamlessly from point to point in a clean area without integrity compromises caused by connecting and reconnecting the system, along with potential micro-particle contamination from connector degradation.

Another advantage of using Wi-Fi to link the workstation to the facility is that today most advanced facilities have Wi-Fi-based system backbones connected to legacy subsystems, allowing the workstation to directly communicate with and gather/share information with the facility server. Able to do everything a stationary system can do, the AMW-1321AX-E01 workstation reduces both infrastructure cost and deployment complexity over a desk-based system.

In addition, the AMW-1321AX-E01 workstation features a user-friendly widescreen display, with an integrated touch-screen and intuitive icons for easy and safe operation. This advanced feature benefits both the users and software developers, who find the familiar smartphone-like, touch-screen process to be much more intuitive to work with.



Customization is Key

Since individual pharmaceutical facilities often have unique requirements, the new AMW-1321AX-E01 mobile workstation can be customized to meet client needs. Depending upon the level of change needed, the process can range anywhere from six to eight weeks for minor customization to several months for more extensive projects.

In all cases, it is very important during customization that the client maintain timely communications during the process to avoid unnecessary and avoidable delays, which can lead to engineering holdups.



Looking Forward

With all of the demanding, evolving, and competitive dynamics faced in the pharmaceutical industry today, the truly mobile, wireless AMW-1321AX-E01 self-contained workstation powered by heavy-duty battery is the workstation of choice for convenience, safety, and efficiency in the pharmaceutical cleanroom.

ABOUT ARISTA CORPORATION

Arista Corporation, recognized globally as a leading manufacturer of ruggedized computing platform for industrial automation applications and embedded computing technology for Internet of Things (IoT) and Industry 4.0 applications. With its standard products and tailor-made solutions, Arista provides Industrial Thin Clients, All-in-one LCD Panel Computers, ruggedized LCD Touch Displays, Industrial KVM solutions over category cable or Fiber cable for a variety of industries like, pharmaceutical, food & beverage, automobile, oil and gas, etc. As a result, the benefits Arista provided to the customers are accelerated time-to-market, reduced total cost of ownership, product longevity and the best fully integrated applications overall.

ABOUT THIS REPORT

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