Securing MedTech That’s in the Public Eye

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As more healthcare technology moves out of secured hospital areas and into much more open, public spaces, medical device designers need to incorporate more sophisticated access control technology into the devices they are developing. Electronic access solutions can offer the security needed to ensure patient data remains secure and regulatory compliance is achieved.

The healthcare industry has evolved significantly, bridging the gap between science and technology with new advances in patient care. As the increasing availability and portability of new technologies and mobile medical equipment continues to play an important role in medical practices, the need for security has become a key priority. Access to medical equipment, supplies, and information must be monitored to adapt to changing standards for safety and protection.

In many medical facilities, equipment, pharmaceuticals, and supplies are no longer kept in separate rooms away from public areas; instead, accessibility and mobility have pushed valuable equipment and computers that store sensitive data into the open. In response, new laws including the Health Insurance Portability and Accountability Act (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH) have been enacted to enforce higher security measures for the evolving healthcare industry.

These factors have created new design challenges for medical equipment manufacturers, who are choosing equipment-level electronic access solutions (EAS) to meet their security needs. EAS, which features intelligent electromechanical locking with remote security monitoring and audit trail capabilities, allows manufacturers to provide the appropriate level of security, control, convenience, and access control at the equipment and storage cabinet level.

Improving Security

The introduction of Electronic Health Records into the healthcare industry has enhanced communication of patient information between medical professionals, but has also created a need for new types of security systems to protect this data.

The ability to control and monitor access to different enclosures has become a significant challenge for many healthcare professionals. Enclosures ranging from filing cabinets and charting stations to equipment such as bedside diagnostic machines can be difficult to manage when secured with traditional mechanical locks.

Compared to lock-and-key systems, which have the potential for keys to be misplaced or stolen, electronic access solutions offer a more enhanced level of security through the use of concealed, tamper-resistant electronic locks that can be activated with easily managed electronic user credentials.

In an electronic access system, the electromechanical lock or latch (EML) works together with an access control device, which acts as a user interface for the end user who is accessing the enclosure. An electronic rotary latch is a type of EML that provides a simple, secure solution for many medical applications. With its compact design, the electronic rotary latch occupies minimal interior space when mounted within the enclosure’s interior, providing a clean, tamper-proof exterior appearance. This EML can be easily wired directly to a broad range of access control devices, including standalone keypads, biometrics, and networked RFID proximity readers that can be networked for a complete remotely managed system.

Monitoring Access Control

One of the most significant benefits of EAS is the ability to monitor and control access to multiple enclosures remotely. A networked EAS can be used to remotely control electronic locks, manage access credentials, monitor access, and provide audit trails. This unique feature allows the end user to record who accessed the

enclosure, how long it was opened, and when the event occurred.

The EAS can be integrated with the facility’s security network so access can be monitored in real-time from building entry to equipment access. When the EML-equipped enclosure opens or closes, a signal is sent to a monitoring system to confirm and log access. In addition, EAS allows access records to be viewed remotely, so monitoring personnel need not be onsite.

Electronic access solutions can provide an indisputable access audit trail for all doors and cabinets that are secured electronically. Equipping electronic data storage enclosures with an EAS solution can add additional protection against unauthorized access to a facility’s data network, protecting patient records, and helping to avoid costly data breaches.

Conclusion

For medical equipment manufacturers, selection of the appropriate access control solution is critical to provide the optimum industrial design, security, installation, and system integration. The security and versatility of EAS enables security and healthcare personnel to manage and protect equipment, pharmaceuticals, and confidential data using intelligent, physical security systems.

The remote monitoring capabilities that electronic access solutions provide can be used as a valuable asset in the protection of confidential patient data. When combined, intelligent electronic locks and access control devices enable audit trail recording to meet healthcare industry standards for securing valuable information and resources against the threat of unauthorized access.

For more information, visit www.southco.com [1].

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[1] http://www.southco.com