DS smart™ Systems Overview

DS smart™ technology from Direct Supply provides a solution to connect to medical equipment, capture readings from that equipment and transmit those readings to a third-party electronic medical records (EMR) system. The solution relies on a software application that resides on a tablet to communicate with the medical equipment and to transmit the readings to the EMR system using a care provider's in-house wireless network.

This guide provides information concerning the technical specifications required to implement DS smart™ technology. The wireless network that is used for communications must provide stable connectivity and access to the network throughout the facility. Installation, configuration and maintenance of the network is the sole responsibility of the care provider.

Network Requirements

- Wireless (Wi-Fi) coverage in the building: Wi-Fi supports 802.11 b/g/n standards
- SSID for identifying wireless access points
- DHCP for IP address assignment
- HTTP/HTTPS ports 80 and 443 are open
- Network authentication (one of the following):
  - WEP 64 and 128
  - WPA2 Personal
  - WPA2 Enterprise
- Network Bandwidth: DS smart™ technology relies on small data packets and requires minimal network bandwidth; situations where the Wi-Fi and internet connections are heavily used for other customer applications could result in low network capacity and could affect performance

Tablet Hardware

- Android tablet running Android 6.0 or above
- Requires Wi-Fi connectivity for data transmission to EMR
- Requires Bluetooth Low Energy (BLE) following Bluetooth Core Specification V4.0
- Minimum tablet resolution of 1280 x 800 pixels
- The DS smart™ software has been tested with the following recommended tablet:
  8" Samsung Galaxy Tab E, Model SM-T378VDAAXXX

Security

- DS smart™ technology follows HIPAA guidelines for secure processing of Personal Health Information
- Data encryption for local storage using Android NativeScript Secure Storage and Conceal 2.0
- All transmitted data encrypted using AES-256 (256-bit Advanced Encryption Standard) with HTTPS/TLS certificates
- Automatic logout of users after a non-use period; DS smart™ technology follows guidelines for automatic logout established by the EMR system