



# Healthcare

Data Capture Solutions for Healthcare Applications





# Ensuring Accuracy in Healthcare

The healthcare industry constantly faces various challenges, and it's crucial that germs are minimized in the environment. Doctors and nurses have a great responsibility of holding patients' lives in their hands. Even though they have heavy workloads and long working hours, human errors are unacceptable. In addition, counterfeit medicines are becoming an increasingly serious problem. It is challenging to keep medical records up-to-date and maintained at all times. Any wrong data can have serious consequences for the patient – patients can easily be given fake drugs or repeated dosages of medicine.

Addressing these challenges in the healthcare environment, CipherLab antimicrobial protection series has Microban® antimicrobial technology built into the product itself; it is an intrinsic part of the device that will not wear off during its lifetime. The antimicrobial treatment minimizes the presence of microbes by interrupting the lifecycle and stopping the reproduction of bacteria. In addition to the antimicrobial treatment, these devices also come with a disinfectant-friendly white housing that allows the antimicrobial treated surface to withstand repeated alcohol cleaning.

In addition to the antimicrobial series, all CipherLab scanners and mobile computers can help minimize medical errors by eliminating paperwork that can suffer from mistakes and easily get misplaced. Furthermore, eliminating paperwork also eases the workload for caregivers. To address the issue of counterfeit medicines, AIDC devices help by allowing rapid identification and reporting suspicious counterfeit drugs. With CipherLab handheld scanners and mobile computers, caregivers can rest assured that the information they have is correct.

CipherLab is committed to providing excellent AIDC products that address the needs of the healthcare industry. With the implementation of CipherLab devices in the healthcare setting, productivity and efficiency are improved, and the best care is assured.





# Applications

## Patient identification

When patients arrive at the hospital, the check-in counter or in a consulting room, they receive a barcode with their personal information that is entered in the hospital information system (HIS). The patient information in the system is essential in identifying the patient and matching them with their treatment, medication, or even operation. As patients move through the hospital system, mobile computers and handheld scanners, linked to the HIS, reduce the time spent on paperwork and also improve the accuracy and efficiency.



### 8000H Mobile Computer

The pocket-sized 8000H has built-in Microban® antimicrobial treatment and disinfectant-friendly housing to protect the product surface from inhabiting bacteria. The low-power consumption provides 100-hour continuous workflow, while the medical staff can carry it around and transfer data via optional BT connection. The Application Generator and phone-style keypad provides great usability, which reduces the training time needed for new staff.



## Test Result Tracking

For specimen collection at the bedside, nurses need to scan the barcode on the patient's wristband to verify the patient's personal information. A barcode is then attached to the tube, which allows lab technicians to scan the barcode and make sure the information on the tube matches with the check-up sheet. Then the analysis report is updated to the HIS. Handheld scanners and mobile computers help eliminate errors from manual data entry and accelerate record management.



### 1500H Handheld Scanner

The 1500H provides a wide range of options: You can choose linear imager, laser, 2D reader, and between the choice of the corded and cordless design. The 1500 series Bluetooth scanners have a 90-meter line-of-sight range, enabling instant data transmission to the back end system, keeping the database updated with the most recent test results. Capable of reading high-density barcodes up to 3 mil, these scanners can properly capture small barcodes on test tubes or other small containers. Furthermore, with its antimicrobial treatment and disinfectant-friendly housing, the 1500H minimizes the risk of germs on the device.



## Dispensing Medications

When patients come into the clinic, nurses can pull up complete medical histories of them by scanning the barcodes on their medical records. Doctors can easily update diagnoses and prescribe medication in the system. After the doctor has seen the patient, the patient is given a medication slip to take to the pharmacy. Staff in the hospital pharmacy can immediately see this real-time information, allowing them to scan the relevant medication package with a 2D reader to dispense medicines. This ensures that the correct medication is given to the right patient exactly as the doctor prescribed.



### 8400 Mobile Computer

The 8400 has the optional capability of reading 2D barcodes that used on the packaging by many pharmaceutical companies. Up to 8GB expandable memory, combined with Micro SDHC to store more patient records, the 8400 provides caregivers access to the information they need anytime and anywhere. In addition, WiFi allows mobile caregivers to transmit data to the mainframe immediately after they dispense medicines. The big display and bright LED backlit keypad help confirm data capture even in the dimmest wards.



## Point of Care

Keeping up-to-date patient records regarding symptoms, medication, and progress is important to ensure the patient gets the best and appropriate care. Especially during peak seasons, there are many temporary and substitute nursing staff who are not familiar with the patients' conditions. A medical cart with a Bluetooth scanner or a mobile computer gives them instant access to patients' records at the bedsides – physician notes and medication orders appear instantly as needed.

### 1660H Pocket-sized Bluetooth Scanner

The 1660H is pocket-sized, extremely lightweight, and has a lithium-ion battery that lasts for up to 40 hours. It provides maximum mobility for caregivers who need to do the rounds in large hospitals. The 1660H can be paired with other Bluetooth devices, such as a tablet. Through the 3610 Bluetooth transponder, this pairing is made even easier with quicker, real-time data transmission for instant viewing. The Microban® antimicrobial treatment and disinfectant-friendly housing inhibits the growth of bacteria, making it ideal for caregivers who have to share the device.



## Medical Supplies Inventory

Traditionally, the method to keep track of medical supplies is through paper tracking. With thousands of items in a care facility, this task can be daunting. A mobile computer with WLAN can provide instant inventory status. By efficiently managing hospitals' inventory and tracking best-before dates on medications, healthcare facilities can control the stocks more efficiently.



### 9300 Mobile Computer

The 9300 provides 1D or 2D readers for different application needs. It is also built with the Cisco CCX V4-certified Summit WLAN module to provide stable wireless communications, keeping healthcare workers connected at all times. Rugged, designed to survive a 1.5m drop test and an IP64 rating, and with a large and bright screen and keypad, the 9300 provides maximum productivity, shift after shift.



# Smart Solutions – Great Benefits

## Keeping Costs Down and Saving Time



After the Czech Republic made the transition to a capitalist economy, nursing homes in the Czech Republic billed patients by recording charges on hand-written forms and spreadsheet-based systems. This took time and often resulted in human error. After implementing the CipherLab 8001 mobile computer to scan barcodes on medical records and wristbands, patient information is now correctly documented with just a single scan. Time spent on billing has been greatly reduced and human errors have been minimized, which has resulted in cost reduction for the nursing home.

## Ensuring Patient Safety and Streamlining Inventory Management



CHC Healthcare Group, a Taiwan-based market leader in medical devices, was looking to improve its inventory management. In the past, they could only manually document, which was time consuming and mistakes were easily made. With the implementation of the 9671, the system gives reminders 180 days prior to the expiration date, which allows for easy management of the intraocular lenses. WLAN allows inventory checks to be instantly updated into the system and now they can see the inventory information right away. As a result, not only has the whole process been streamlined, but patient safety has been safeguarded and inventory cost has been greatly reduced.

## Extend Your Applications

for Effective Data Capture, Transmission and Management

The CipherLab software development kit enables easy customization with a variety of applications and tools to satisfy your unique day-to-day operation needs.



### **FORGE** Application Generator

Easily customize applications for your needs



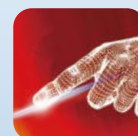
### **MIRROR** Terminal Emulator

Extend complex mainframe applications to CipherLab devices to save time and development effort



### **STREAM** Wireless Studio

Develop wireless applications and manage multiple CipherLab devices effectively



### **BLAZE** C and BASIC Compilers

Enable quick development and deployment of custom business applications





# Other Recommended Products



## 1000

- Supports high density 1D barcode
- Reliable performance with 5-year warranty
- Contact scanning to ensure accurate data capture even with closely printed barcode
- Built with TPU rubber boot to ensure comfortable usage



## 8200

- Up to 100 hours of operation in batch mode
- Support 1D and 2D barcodes
- Expandable memory with Micro SDHC slot
- User-friendly interface and easy-to-read backlit LCD screen



## 9600

- Supports 1D and 2D barcodes
- Cisco CCX V4 certified WLAN
- Optional RFID and camera
- 3.5" color VGA or QVGA touch screen
- Built with IP64 and capable of surviving 1.5 m repeated drops onto concrete

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