CIPHER LAB
Smarter

Manufacturing

Data Capture Solutions for Manufacturing Applications

Create a Non-Stop Production Line and Cost-Effective Solutions for Manufacturing

The growing complexity of manufacturing requires an increased speed of production, global distribution and adhering to rising customer demands. The traditional manual process no longer meets requirements and must be automated to pursue business success. In order to minimize inventory and operating costs, all materials must be tracked accurately in the system to ensure precise purchase and deployment. When it comes to defective products, tracking every phase in the production line makes it easier to trace problems back to the source. Meanwhile, centralized management of a workforce improves productivity, while access control in confidential areas enhances security in manufacturing plants. To avoid excessive repurchasing of equipment and tools, they must be reliable and durable enough to get the job done in harsh environments, but also easy to use for workers in all respects.

CipherLab mobile computers and scanners feature versatile functions to streamline workflow. Supported by a stable wireless connection and versatile software, all data can be transmitted to the back-end system in real-time. Management can always access up-to-date information to effectively manage production line, inventory movement and labor status. CipherLab AIDC products have long-lasting performance to operate through multiple shifts, enabling uninterrupted workflow and maximized productivity. CipherLab products are built to perform under conditions which are dim, dusty, humid, and extreme in temperature, and guarantee to deliver a high return on investment. Combined with various data capture options ranging from linear imager, laser, 2D imager, to long-range laser and RFID, these powerful devices are designed to fulfill your every requirement.

CipherLab is committed to providing quality AIDC products to improve supply chain management, enabling accurate data collection no matter how harsh the environment is. With rugged design and outstanding capability, your manufacturing process results in greater efficiency, improved speed and greater cost savings.
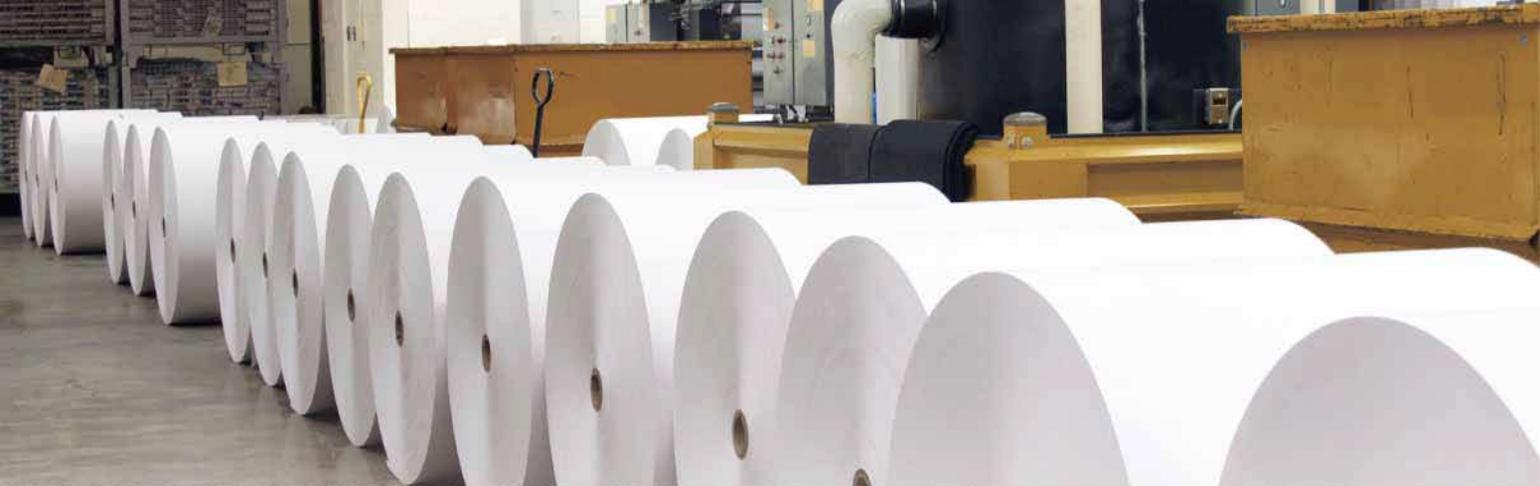
Applications

Assembly

The use of an assembly line allows production workers to add parts in a sequential and logical manner. The production worker scans the barcodes on the parts or semi-finished products and assembles those materials into finished goods following the SOP. The mobile computer is then used to connect with a *Bluetooth®* remote printer; the product labels that are printed are stuck on the goods afterwards. Next, the updated data is simultaneously transmitted to the back-end system via WLAN.
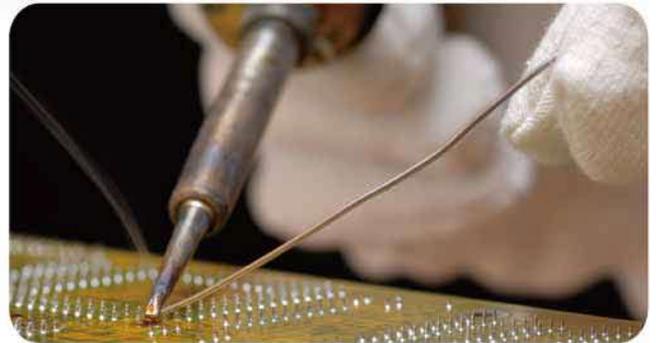
8700 Series Mobile Computer

The 8700 series can operate for 72* hours when connected via WLAN, and 170* hours when used in batch mode. It allows uninterrupted work, which improves efficiency and maximizes productivity. The 8700 series comes with reader options including laser, 2D imager, long-range laser and RFID, providing workers the versatile data capture tool to complete their tasks in the most efficient way. A 44-key keypad for terminal emulation is also available for easy communication with the back-end system. Furthermore, the 8700 series has IP64-rated sealing, 1.5 m drop-tested housing and can withstand 1000 tumbles at 1 m, ensuring survivability and continuous operation in dusty and high humidity environments.

*Battery performance may vary depending on product model, configuration, applications, and features utilized.

Raw Materials and WIP

Proper management of raw materials and WIP can reduce waste and save manufacturers' money. The process starts with the stock keeper, who scans the barcodes to document the incoming items. The data is then transferred through WLAN to the MRP system, and to quality control for inspection. The materials are properly tracked from receiving to their end point through barcode scanning. As parts are dispensed to assembly stations, production workers integrate raw materials into parts or semi-finished products and apply serial number labels on them following SOP.

CP50 Series Mobile Computer

The CP50 series mobile computer allows receivers and quality inspectors to properly scan and track all raw materials and WIP. It contains a built-in 802.11 b/g module offering a reliable wireless connection, allowing data to be sent to back-end systems simultaneously and keep the system updated. With an IP65 rating, the CP50 series is durable enough for a manufacturing plant. It also has undergone 1.5 m drop resistance and 1000 tumbles at 0.5 m, delivering optimum performance in a harsh environment.

Quality Assurance

Ensuring that products are high quality is imperative for manufacturers. The quality controller scans the barcodes on inspection lists and products to begin with the procedures, followed by updating information to the back-end system via WLAN after the inspection is completed. If the units meet the quality standards, the inventory system is updated simultaneously, and unqualified units need to be returned for rework and kept track of.

8400 Series Mobile Computer

The 8400 series mobile computers help to improve efficiency and accuracy during the product-inspection stage by constantly updating the database of the back-end system, allowing imperfect items to be sent back for rework immediately. It can work non-stop for 35* hours in WLAN mode and 110* hours in batch mode, which helps manufacturing operations maintain quality control. In addition, certified with IP54 and drop-tested at 1.5 m plus 1000 tumbles at 1 m, the 8400 series is reliable in any manufacturing setting.

*Battery performance may vary depending on product model, configuration, applications, and features utilized.

Labor Tracking

Tracking your labor can be simplified and streamlined through scanning. The production worker scans the ID badge or enters the employee ID into the terminal at the beginning of the worker's shift. After finishing each production process, the employee's ID and task information can be entered into the device, which timestamps the worker's status. Checking the employee out at the end of their routine can be fulfilled in the same manner, completing the process. The labor status can then be transmitted to the back-end system through WLAN or communication cradles.

9200 Series Mobile Computer

The 9200 series mobile computer can help your company expedite the labor tracking process, and thus payroll, in a secure and accurate manner. Enables the workers continuously update their routines and managers are thus able to easily monitor where their workers are in the production process, and can make adjustments accordingly. The 9200 series also has optional RFID for ID badge reading. Sturdily built, its IP65 rating and 1.5 m drop resistance is capable of regular operation even under harsh environment or after careless drops.

*Battery performance may vary depending on product model, configuration, applications, and features utilized.

Plant Maintenance and Repair

All manufacturing sites need to be constantly maintained to keep up production efficiency. The maintenance on a particular machine begins by having the service technician scan the asset ID or RFID tag. As the technician goes about the inspection procedure, they can enter the service records into the device. When the maintenance is completed, the technician can update the repair lists, schedules, or problems through WLAN to the back-end system. The technician also has the choice of updating the information via communication cradle after returning to the office.

CP60 Series Mobile Computer

Designed to meet a variety of inventory management needs, the CP60 series is rated with IP65/IP67 standards and can withstand 2.4 m drops onto concrete, which safeguards the productivity in harsh environment. Along with a powerful 1 GHz processor, CP60 speeds up the handling of diverse orders. What's more, CP60 is armed with reliable CCXv4 certified 802.11a/b/g/n wireless communication to ensure real-time data transmission within warehouse environment.

Smart Solutions – Great Benefits

Minimize Human Errors and Improve Efficiency

Formosa Plastics Group, Taiwan

Founded in 1954, Formosa Plastics Group has grown to be one of the largest enterprises in Taiwan with US$16 billion in capital and US$76 billion in assets. Their repertoire includes biotechnology, petrochemical processing, and production of electronics components. To improve the efficiency of equipment maintenance and reduce the errors in processes, Formosa Plastics Group adopted the 9500 RFID mobile computer for inspection management. Engineers are now able to quickly understand mechanical issues by reading RFID tags, at which time the inspection steps are shown on the display. The engineer can record the operating parameters into the 9500, and the manager can immediately identify the inspection progress and engineering status during each service with the e-report that is compiled by the system. Additionally, Formosa Plastics Group no longer has to be concerned about barcodes that cannot survive harsh cleaning chemicals.

Streamline Order Fulfillment and Ensure Shipment Accuracy

Lite-On Mobile, China

A global design and manufacturing partner for the telecommunications and electronics industries, Lite-On Mobile, provides services and commodities from design and concepts to manufacturing, final assembly and testing. Its net sales in 2010 were EUR 569 million, with employees around 14,000 worldwide. Lite-On Mobile put the CipherLab 9371 2D mobile computer into use to streamline order fulfillment and reduce errors. The 9371 2D mobile computer allows Lite-On Mobile workers to scan barcodes on working orders (W/O) and then search for information through WLAN in the back-end system to verify order validity. Workers then proceed with production after the W/O is confirmed. The 9371 is also used to scan the barcodes on shipping notices and cartons to verify if all items in the shipments are correct.

Other Recommended Products

8300
- Up to 270 hours of operation in batch mode
- Options of linear imager, laser, long rang laser and RFID reader
- Built with IP65 and 1.2 m drop resistance
- *Bluetooth®* and 802.11 b/g connectivity

1861
- Built with IP64 and 1.5 m drop resistance
- Sustain 1000 tumbles at 1 m
- Read and write UHF RFID tag
- Compatible with any *Bluetooth®* mobile devices

1704
- Built to IP54 standard and survives 1.8 m drops
- Support 1D and 2D barcodes
- Free ScanMaster software for easy custom configuration
- Multiple "good scan" signals : bright LED alert, adjustable volume alert and vibration.

Extend Your Applications

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.

SYSDEV KALIPSO Mobile Application Generator
Help users customize application needs effortlessly.

MIRROR Browser & Terminal Emulator
Extend complex mainframe and web applications to CipherLab devices to save time and development effort.

SOTI.net MobiControl
Allow access to a robust set of features that support remote device management.

BLAZE C and BASIC Compilers
Enable quick development and deployment of custom business applications.

wavelink Avalanche and Emulator
Deploy Windows®-based mobile computer into web-based workflows or meet the needs of multiple mainframe environments.

App-Lock
Enable limited access to essential device settings with pre-approved applications.

NAURTECH CETerm
Enable Windows®-based mobile computer to support web applications and extend the power of the mainframe to production workers.