

TRANSPORTATION & LOGISTICS

Digital China

Getac's Rugged Tablets are Digital China's Solution to Warehouse Automation

/ Challenge /

In the past, warehouse forklift trucks required considerable manpower, and due to low efficiency, many human errors would occur. With more intelligent products in the market place, we are able to install an intelligent end of RFID reader onto the forklift truck, improving the efficiency of warehouse logistics. Since forklift trucks are specialized vehicles, and the warehouse environment complex and constantly changing, there are particular requirements for equipment to be installed.

/ Solution /

Digital China and Getac's solution for warehouse automation can specifically solve common issues with warehouse forklift trucks. The solution uses bar codes, RFID to collect inbound/outbound goods information. RTD is uploaded with the help of a wireless network, ensuring the accuracy of the input speed of all data details of the warehouse management.

/ Benefits /

Forklift truck operators are able to clearly see the work assignment and planned route as well as their location on the Getac tablet. When loading or unloading, the real-time storage location and goods information can be identified. With information given in real-time, stock counting, transfer, dissembling and other operations can be completed simultaneously, greatly enhancing work efficiency.

/ Quote /

"Providing our customers with comprehensive smart solutions is our business vision. Getac UX10, F110 and T800 deliver exactly what they need. Not only do Getac rugged tablets offer extraordinary durability and reliability, they also integrate perfectly with our warehouse logistics software and radio frequency identification (RFID) scanning solutions. The partnership will see greater service to customers. We even deliver ultimate solutions for the fixing, charging and shock resistance of forklift trucks, guaranteeing customers with exceptional performance."

General Manager Yan, Department of Internet of Things, Digital China.



Getac T800, F110 & UX10
Ultra Rugged Notebook

/ Challenge /

With the level of warehouse automation advancing, the demands for each operation are becoming ever more rigorous. Take medium sized forklift trucks for example; in the past, they relied on memory and the naked eye, leading to low work efficiency and human error. With more intelligent products in the market place, an intelligent end RFID reader can be installed, increasing the efficiency of warehouse logistics. Since forklift trucks are specialized vehicles, and the warehouse environment is complex and constantly changing, there are particular requirements for equipment to be installed. First, the equipment needs to be durable and shock-resistant in order to adapt to different environments. Second, excellent wireless communication performance is required to transfer data/information within the warehouse. Due to complex wiring, the equipment requires longer battery life.

/ Solution /

Digital China is a well-known provider of integrated IT services in China, delivering business and IT solutions to individual consumer and large sector industries including financial, government, telecommunications, public utilities and private enterprises. Digital China is in now partnership with Getac to introduce warehouse automation solutions, which will further enhance the information technology for the logistics and manufacturing industries. General Manager Yan, Department of Internet of Things, Digital China, says: "Providing our customers with comprehensive smart solutions is our business vision. Getac UX10, F110 and T800 deliver exactly what they need. Not only do Getac rugged tablets offer extraordinary durability and reliability, they also integrate perfectly with our warehouse logistics software and radio-frequency identification (RFID) scanning

solutions. The partnership will see greater service to customers. We even deliver ultimate solutions for the fixing, charging and shock resistance of forklift trucks, guaranteeing customers with exceptional performance."

The entire solution uses bar codes, RFID to collect inbound/outbound goods information through handheld/vehicle terminals. Real-time data (RTD) is uploaded with the help of a wireless network, ensuring the accuracy of the input speed of all data details of the warehouse management. Thanks to positioning technology, the vision of real-time positioning of personnel, vehicles, and goods are fulfilled. With the combination of the monitoring system, full tracking and "visualization" of the goods being circulated in the warehouse is accomplished when it comes to planning work paths, vehicle dynamic adjustments and navigation. Using machine vision analysis and edge computing technology to accomplish real-time alarms for illegal entry and exit of personnel and vehicles, ensures the security of the warehouse. Through behavior and status analysis, pre-warnings can be set to avoid errors and maintain normal workflow.

With the complex warehouse environment and the irregular shape of forklift trucks, Digital China and Getac have together found a solution to essentially overcome the common pain points of warehouse forklift trucks:

1. High damage rate of equipment due to changing environments. Getac fully robust tablets have passed all types of rugged tests for durability and shock. For example, the F110 is brought out to protect the tablet against drops, shocks, spills, vibration, dust, liquid and more. It is in compliance with standards including MIL-STD-810G, IP65, and MIL-STD-461G.
2. Data transfer. The UX10 seamlessly supports digital transformation, offering connectivity through BT, WiFi, and optional 4G LTE. These

functionalities ensure the UX10 stays connected whether indoors or out.

3. Electricity supply. Getac offers a series of battery configurations and options, including an optional high capacity battery and bridge battery, allowing the device to stay on at all times and making it ideal for multiple work shifts.

/ Benefits /

Digital China and Getac's automated warehouse solution allows the forklift truck operator to clearly see his work assignment and planned route as well as his location on the Getac tablet. When loading or unloading, e real-time storage location and goods information can be identified on the tablet and it allows the operator to check with other personnel in real-time assuring everything is order. With information given in real-time, stock counting, transfers, dismantling and other operations can be completed simultaneously, greatly enhancing work efficiency. Result of test: after using the proposed solution, inbound time is reduced from approx. 3h/loading to approx. 0.5h/loading, an average improvement of 80%. Outbound time is reduced from approx. 1.5h/loading to approx. 0.5h/loading, an average improvement of 60%. Average inbound and outbound documentation was reduced by 70% with an almost 100% accurate inbound rate.

/ Digital Chinal Group /

Digital China Group has been striving to make a difference in information technologies for the past 20 years. Digital China is now an integrated IT service provider with an annual turnover exceeding RMB80 million and total assets exceeding RMB25 billion. For many years, China Digital has relied on a network covering 30000 partnerships, providing digital products, solutions and professional IT services to over a million enterprises and hundreds of millions of consumers.

