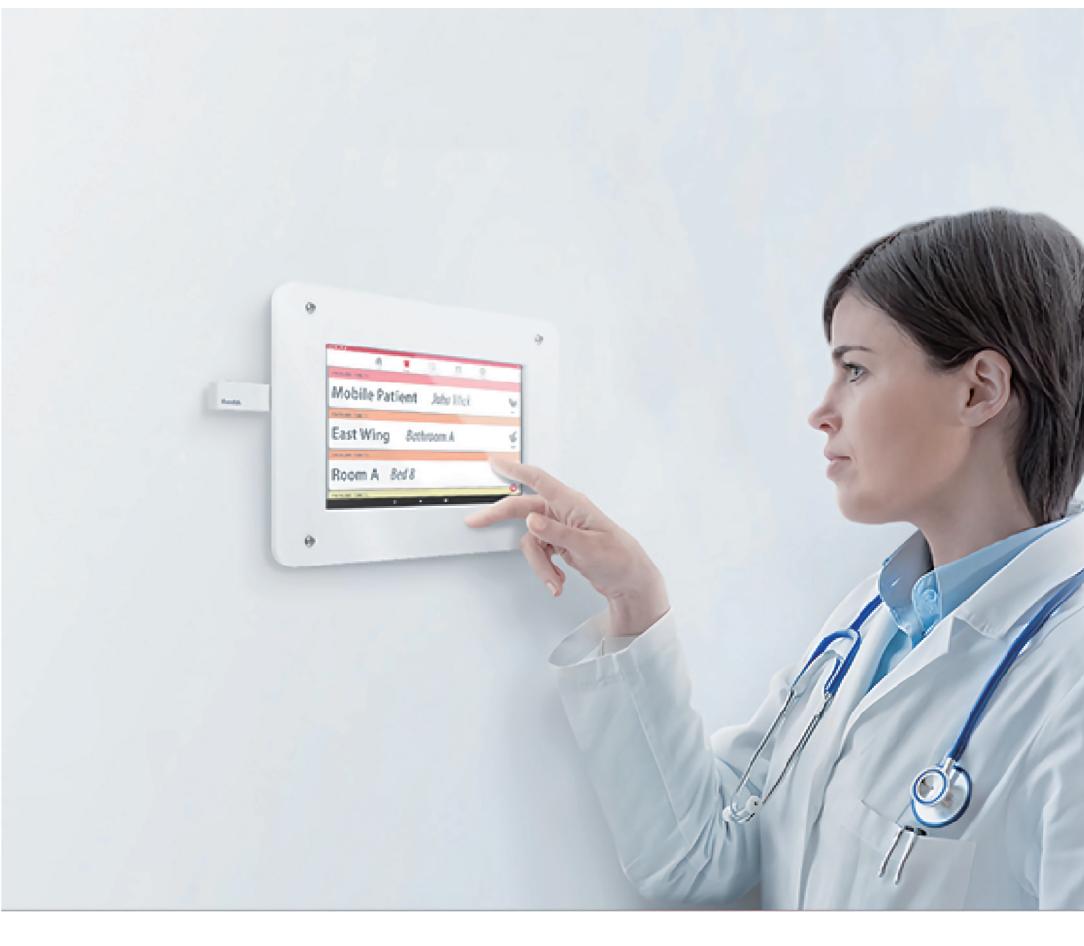# EM-T11X Rugged Tablet PC Promotes the Medical Information Transformation



## Challenge

With the Internet and digitization bringing subversive changes in many industries, technology is constantly changing people's expectations for medical care. On the demand side, more and more patients hope to get more convenient and comfortable medical services. On the staff side, medical staff expect more efficient and stable system work. However, paper recording and human inquiry in medical care have low efficiency and high error rates, which is easy to endanger the safety of patients. To improve this problem, the hospital urgently needs to introduce safe and reliable intelligent terminal equipment.

## Solution

EM-T11X rugged tablet PC through the unified adaptation of Android 12 operating system and the integration of wireless communication, reinforced design, multi-interface, and diverse functions, to improve the stability and security of medical systems and services. It is convenient for medical staff to clock in by face recognition, view patient information in real-time, respond to patients' calls, and other medical procedures.

## Benefits

EM-T11X rugged tablet PC shows IP65-grade excellent performance in waterproof, dustproof, and anti-shock, making it easy for medical cleaning and disinfection. With the high-temperature-resistant design, it ensures all-day operation without heat downtime. It can work with the docking charger and power-on startup software, so that it can be charged immediately for lasting battery life to keep online, meeting the needs of patients to call medical staff at any time, and greatly improve the satisfaction of hospital services and the stable operation of the medical system.



**EM-T11X**
Rugged Tablet PC

# Challenge

Medical care is a rigid demand of everyone, and it is also an important area of people's livelihood. The quality of medical service directly affects the happiness index of residents. With the continuous development of the economy, all localities continue to increase investment in medical hardware and software infrastructure, but problems such as uneven distribution of medical resources, insufficient convenience of services, and low efficiency of paper recording still exist. As the core of the medical service system, the time has come for the hospital to carry out the digital transformation of information through the "smart upgrade".

Due to the particularity of the medical environment, the hospital has a strict demand for the battery life and stability of the equipment, however, the consumer tablet devices on the market are difficult to run in a stable state for a long time. By default, the consumer tablet's battery will automatically shut down after running out of power, resulting in the terminal system being in an offline state, so the patient cannot call the medical staff through this terminal.

In addition, consumer tablets are not good at waterproof, dust-proof, shock-proof, or high-temperature-resistant, so they are not easy to clean and disinfect, and are very prone to failure after water and collision vibration, resulting in data loss, transmission interruption, equipment loss, and other situations. When it is operating all day or needs to be placed in a specific anti-theft warehouse for internal use, it is easy to lead to equipment heating and downtime. Therefore, only a rugged tablet PC designed for a special industry environment, with strong environmental adaptability and high operating performance, can meet the needs of intelligent upgrading in hospitals.

# Solution

The client is a hospital in the United Kingdom, which has been operating for more than 20 years. To improve management efficiency and service, and reduce administrative costs, it has begun to reform towards digital management and paperless office in recent years. After comparing and testing the rugged tablet devices of several manufacturers, the client finally chose the EM-T11X rugged tablet PC to realize the management information.

## Solution of EM-T11X

EM-T11X rugged tablet PC not only establishes a digital communication channel for patients and medical staff, but also greatly assists medical staff in efficiently handling tasks as an intelligent information collection and display terminal.

After equipping the hospital wards with EM-T11X rugged tablet PCs, it integrates a complete hospital digital transformation solution with medical services such as medical call system and patient positioning system through the easy-to-use Android 12 GMS operating system.

The medical staff first performs face recognition to clock in through the EM-T11X rugged tablet's software, and at the same time logs the tablet into the medical call system. As a result, the EM-T11X can receive patient call signals, and the medical staff can communicate with the patient remotely through the tablet. On this EM-T11X rugged tablet, medical staff can view the basic information of patients at any time, such as name, age, gender, medical record number, etc., as well as the medical records of patients, such as examination results, diagnosis reports, treatment plans, to facilitate timely and efficient daily diagnosis and emergency rescue.

Round nurses can also record patient data in real-time through the tablet and update the patient's situation on the hospital's Intranet platform in real-time, which is convenient for doctors to write prescriptions for patients and arrange surgical treatment. When necessary, the patient can send a call signal through the signal transmitter in the hand, which is matched with the call system, and the signal is further transmitted to the EM-T11X through the repeater. At this time, the tablet will indicate the bed, room number, and other information that needs medical assistance, so that medical staff can provide assistance promptly, and realize a series of paperless reforms, from patient management to staff time clock.

# Benefits

## Medical efficiency improvement

The EM-T11X rugged tablet PC is powered by an ARM octa-core processor with a 6nm process and an Android 12 operating system to provide stable and reliable performance. The time for the EM-T11X to start the medical call system has been reduced to less than 2 seconds compared to previous devices, the operation response speed has been improved by at least 40%, and the work

efficiency of the hospital has been improved by at least 30%. EM-T11X rugged tablet PC has 8G+128G large memory capacity, to keep the medical call system running in the background.

## Medical visual management

EM-T11X rugged tablet PC can collect patient information and medical records in real-time, and use the built-in dual-band WiFi, Bluetooth 5.2, and 4G wireless network to upload data to the hospital system background, replacing paper recording, which greatly reduces the data error rate caused by handwriting and secondary input, to realize the collaboration of medical staff, simplify

the workflow, collect, and access patient information anywhere.

## Guarantee for medical security and stability

The EM-T11X rugged tablet PC meets IP65 standards and is 1.22m drop-resistant, which is suitable for daily medical cleaning and disinfection. Accidental falls during mobile work are not enough to interrupt its operation, so equipment wear costs can also be reduced. High-temperature-resistant design allows it to operate at temperatures between -20 ° C and 60 ° C, so it is suitable for 24/7 operation in all corners of the hospital. By using EM-T11X as the hospital's call terminal,

downtime is reduced by at least 25%, further ensuring the stable operation of the hospital's medical system.

## Prompt medical calls and response

The EM-T11X rugged tablet PC is used with the docking charger and the power-on software, which can be charged at any time to ensure that the power is sufficient for a long time, meeting the needs of patients to call medical staff at any time. Since the adoption of EM-T11X, the rates of hospital service satisfaction have increased from 78% to 86%, and customer complaint rates have decreased by about 14%.