



**Kaili Internet of Things Handheld Terminal
K7 User Manual**

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Abstract

K7 is the first dual 4G full Network access intelligent wireless data acquisition terminal, with huge battery capacity and ultra-long standby time; the 800W HD camera, combined with 4-inch high-resolution and capacitive touch screen, fits Android system operating habits; the ultra-thin body gives very comfortable operation experience. It provides users with data acquisition intelligent terminal technologies integrating functions like real-time acquisition, automatic storage, real-time display, instant feedback, automatic processing, automatic transmission, etc.



Key Features

- Quad-core, Android 5.1
- 4-inch HD large screen with 8Mp camera
- Dual 4G, WIFI, Bluetooth, GPS
- 1D 2D barcode scanning, NFC
- 1.5 meters drop test
- 4000mAh with over 12 hour work
- IP65
- Application

Manufacturing/Warehouse/Truck company/Packing process/Stores/Package service /Hospital

Application

- Logistics

In order to make the management and process of warehouse simple and efficient, Kaicom dedicates to develop and provide products which work at middle and terminal part of logistics.

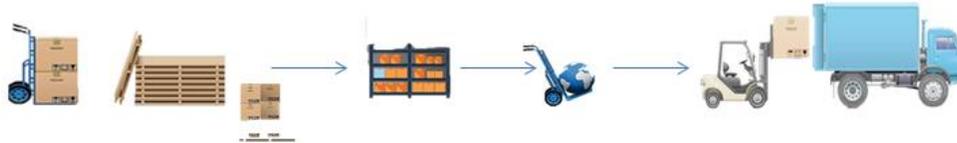
PDA can scan terminal data, transmit real-time information, direct display, synchronize and exchange data with platform, record and track.

Application in logistics include three parts warehouse, packing and delivery. Details are as below.

Warehouse logistics



Packing process



Delivery service



1. Warehouse logistics

- 1) Every goods has unique barcode or QR to mark its information before going out of factory.
- 2) After shipped into warehouse, workers will use Kaicom PDA to scan barcode and QR and transmit data to platform with wifi or 4G.
- 3) Platform can record these data, assign storage address and print warehouse entry.

2. Packing process

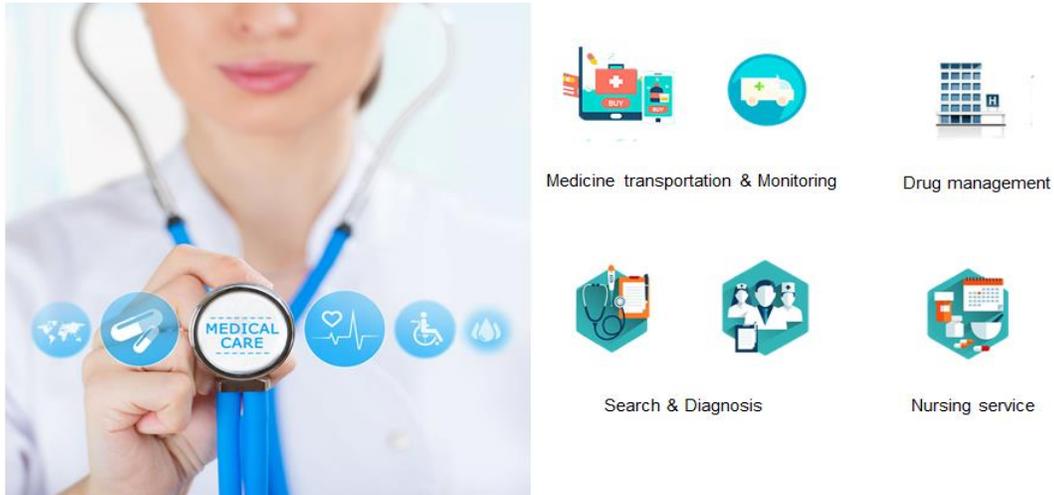
- 1) After stocking in, Kaicom PDA can download information from platform and help workers to arrange location and shelf for goods.
- 2) when delivery order comes down, workers will get notice from PDA terminal. It includes goods quantity, shelf location, when and where it needs to go.
- 3) Every move of package can be recorded with PDA, it is simple and precise to track the status of goods.

3. Delivery service

- 1) When goods go out of warehouse, Kaicom PDA will be used to scan each package and change the status.
- 2) PDA transmit real-time data to synchronize information with platform and other department.
- 3) At the end of delivery, postman provides package service. They use handheld PDA to scan barcode or QR when the parcel is signed or payed.

- Healthcare

Medicine quality and security, precise therapy and efficient treatment are getting more and more critical for people's life. It is trend to use digitalized and informative system to monitor and guarantee the process from manufacturing to usage of medicine. Kaicom PDA is a kind of handheld terminal to capture data with barcode and QR. It can get unique information of each medical object, and interact with healthcare platform.



1. Medicine transportation & monitoring
Medicine transportation is highly demanded. It's very important to control the environment of the freezing container in shipment. Kaicom PDA can integrate with temperature sensors, monitor the whole transportation process and transmit real-time data to hospital or medicine store system.
2. Drug management
Drugs are the basis of hospital. It needs excellent system to manage the storage and usage. Kaicom PDA is like terminal nerves to capture and send data to management center. With timely information, patients can get proper treatment.
3. Search & diagnosis
In the past, doctors need to write clinical history in paper. Or record patient information in PC. It restrains the communication when the doctor leaves office to check the sickness. It needs mobile products for data connection.
Kaicom PDA can record history of each patient, help doctor to know well of the status. It not only provide efficient therapy, but also improve relationships between doctor and patient.
4. Nursing service
Daily nursing is a complex work. It needs to be patient and careful. But there still has some mistakes happened. Kaicom PDA helps to reduce mistakes.
With PDA, nurses can receive and download information form platform. They can know the location and ID of patient, when and where to give what kind of treatment to them like injection, doze, time and frequency. Everything is in control with Kaicom PDA.

Hardware



The Correct Reading Approaches	The Wrong Reading Approaches
 <p>1 2 3 4 5 6 7 0</p>	 <p>1 2 3 4 5 6 7 0</p>
 <p>1 2 3 4 5 6 7 0</p>	 <p>1 2 3 4 5 6 7 0</p>
 <p>1 2 3 4 5 6 7 0</p>	 <p>1 2 3 4 5 6 7 0</p>

Technology specification

Product	K7	
General	Processor	MTK6735 Quad-core*1GHz
	ROM	8GB
	RAM	1G
	Extensive SD card	32G
	Display	4-inch (WVGA, Resolution: 480*800) capacitive screen
	Camera(optional)	8M pixel, automatic focus, flash is available
	Audio	Mic Speaker 3.5mm earphone/reciever
	OS	Android 5.1
	GPS	Supports GPS,GALILEO,GLONASS and BEIDOU
Scanning Engine	ID Scanning engine (optional)	<p>Resolution: 0.127mm;</p> <p>Readable Distance: 50-300mm;</p> <p>Scanning frequency: 100±20/s;</p> <p>Readable angel: +/-45 °;</p> <p>Decode capability: Code 39,Interleaved 2 of 5, Coda bar, Full ASCII Code 39, Code 128, Industrial 2 of 5, Code11,Code93, UCC/EA 128,UPC-A, UPC-E, EAN13, EAN8,MSI</p>
	2D Scanning Engine (optional)	<p>Scan Angle (skew, pitch, roll) : ±60° , ±60° , 360°</p> <p>Optical Resolution: 5mil(Code39),5mil(PDF417)</p> <p>Depth of Field (10mil Data Matrix) : 7.4cm-25.7mm</p> <p>Decode capability: UPC/EAN/JAN,Code 39, Code 128, Code 32, Code 93, Codabar PDF417,Date Matrix,QR Code, Micro QR Code,Han Xin Code</p>

Network	WAN	FDD-LTE(B1,B3) TD-LTE(B38,B39,B40,B41) TD-SCDMA(B34,B39) CDMA EV-DO Rev.A(BC0) UMTS/HSPA+/DC-HSDPA(B1,B8) GSM/EDGE(850,900,1800,1900)
	WLAN	802.11a/b/g/n, 2.4G 802.11n, 5.8G
	Bluetooth	V2.1+EDR, V3.0+HS and V4.1 HS compliant
	NFC	HF 13.56MHz, Readable distance: 2-5cm ISO14443A/B,ISO15693
Power supply	Battery	3.7V 4000mAh
	Consumption	<2W
	Standby time	>100 hour
	Power	Input: 110-240V AC, 50/60Hz, output: 5.0V DC
Certification	Safe certificate	CCC CE ROHS
	Protection certificate	IP65
Environmental	Operation Temperature	-20° -- 50 °
	Storage condition	-20° -- 70 °
	Operation Humidity	20%—85%RH
	Ambient Illumination	0—10000Lux
	Drop durability	Fall from 1.5 meters high freely
Accessories	Straps	Default
	Hand band	Default
	Stylus	Optional
	Tool package	Optional
	Cradle charger (2 in 1)	Optional
Appearance	Dimensions	185*68*37.5mm (L*W*H)
	Weight	300g (including battery)

Advantages

1. Tough and durable elaboration

Product module is made with one injection of engineering plastics of GE. It supports IP65 and has been applied in many different harsh scenarios.

With professional Gorilla glass, K7 has strong resistance to damage and scratch. Dropping from 1.5 meter to concrete ground is available. Besides, it also contains great resolution and touch sensitivity to make it use comfortably. It supports to use with gloves and operate with water on it.

2. Human engineering design

8Mp camera and 4-inch big capacitive touch screen make users pleased and easy to look up and operate. Keyboard number and size are based on the demands of users. It can be used fluently and precisely.

Android system conforms to customer s' habits. Users can well accept and get familiar with it. Meanwhile, we provide accessories in order to reinforce users' experiences.

3. Excellent data management and control

Equipped with advanced scanning engine, K7 can recognize data with the modes of 1D, 2D and NFC. Even in severe application scene like rainy, misty, blurry or deficiency, it can still achieve efficient, accurate and batch data operation.

K7 can manage intelligent data including collection, storage, download, upload and interactive features with Software integrated in.

4. Variable wireless communication

Combined with variable communication modes, it supports dual 4G of full network, WIFI and Bluetooth. Whatever you need there are always ways for you to connect. 4G has a higher transmission speed. WIFI with two frequencies strengthen signals .Bluetooth can match with counterpart products easily like Bluetooth weighing scale.

5. Huge service time and easy charging

Mobile products are sensitive to the capacity of battery. It is crucial feature. Kaicom usebattery of 4000mAh, it can help users to continue processing data more than 12 hours without any deadly in daily work. When it is vacant, the battery can stand by more than 100 hours. Beyond that it has backup battery and cradle charger to help charging K7 and battery at the same time. Really convenient to use and no weary about its battery consumption.

6. Overall solution and marketing experiences

KAILI achieves massive successful experiences like dealer, medicine, inventory, delivery, government and police and so on. These do good to optimize products features, manage projects, reduce risks and widen supporting service. KAILI is in leading position in PDA industry.



Notice!



- The battery of this product can only be charged with the specified charger. Use of other chargers may cause overheating, explosion and burning of the battery.



- If the product is hot or starts to smoke or emit abnormal odor, the user should immediately cut off the power supply, unplug the power charger, remove the battery, and contact the after-sales service center of the company. Continuing to use may result in fire and electric shock.



- Do not attempt to disassemble or modify the battery in any way, otherwise it will damage the battery and cause malfunction or damage to the host of the product.



- Do not touch the internal high voltage components or parts; otherwise it may cause a risk of electric shock.



- Keep the device away from vases, flower pots, porcelain cups, glasses and other water containers, as well as metal. Water and metal entering this product may cause a risk of fire and electric shock and may cause damage to the product.



- Do not look directly at the laser beam; otherwise it will seriously damage the eyes.



Dedicated to Internet of Things Technologies!



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