

Fingerprint Smart Terminal

Model No.: BM7500

User's Manual
V1.3

Thank you for your purchase of the fingerprint smart terminal BM7500 series (hereinafter referred to as "the device"). Please read the manual carefully to ensure safe and satisfactory operation, and keep the manual for future reference.

This manual is applicable to following type of products:

BM7500 BM7510 BM7520 BM7530 BM7540 BM7550 BM7560 BM7570 BM7580 BM7590

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1. Warm Tips

- (1) The manual is subjected to change without prior notice.
- (2) The manual is a general guide for the product. Functions might be increased or reduced due to customized needs. Please contact local distributors for details.

2. Warning

- ★ Unauthorized disassembly is forbidden, or else at your own risk.
- ★ Do not charge with standard higher than original battery and charger.
- ★ Do not dispose of the product in a fire or heat as the product may cause crack and injury.

3. Product Introduction

(1) Product Photos

a). Front and Sides of the Product



b). Back of the Product



c). Carapace of the product



(2) Components

NO.	Name	Function
1	Front camera	2 mega pixels
2	Fingerprint sensor	To place the fingers on the window capture the fingerprint
3	Reading area	Put the ID card near the zone
4	Power	On/off
5	Reset	Restart the machine forcefully
6	Microphone	For call or recording
7	UART port	Reserved function
8	Mirco USB	USB data port and charging port
9	TF card port	Available for extension (up to64G)
10	Earphone port	3.5mm
11	2Dbarcode reader	Available for built-in 2Dbarcode
12	Rear camera	8 mega pixels and automatic focusing
13	Flashlight	LED flashlight
14	Nut for fixing carapace	Fix carapace with the screw on it
15	Battery cover locker	Push the locker to open or close the battery click
16	Bind glove leather	Installed on carapace, avoid slipping down of handheld device
17	Screw to fix carapace	Install carapace on the back of mainframe with the screw to fix

4. The Quick Start Guide

(1) Charging operation

AC adapter is USB port adapter. Plug the USB connector into adapter's USB port while the other side into the device's Micro-USB port. Plug in AC adapter for Charging.

(2) On/off operation

When the device is power-off, long press the power key for 5 seconds, and the device vibration or screen-on indicates start-up. When the device is power-on, short press the power key to get into standby or wake-up. When the device is power-on but not standby mode, press the power key for over 2 seconds then pop up interface of "power off", "airplane mode" and "silent mode". Then select "power off".

(3) Please power off the device before inserting or removing the SIM card, otherwise the product may be damaged.

5. The Index

Hardware Parameters		
Items	Detailed description	
CPU	1.3GHz GHz Quad-Core Processor	
Display	7.0 Inch Display , 1280×720 pixels	
Touch Screen	Capacitive Touch Screen	
RAM	1G RAM	
SIM card	Standard dual Micro SIM Card	
Data RAM	Onboard	8G ROM
	Expandable Memory	TF Card (up to 64G)
Camera	Front	2 mega pixels
	Rear	8mega pixels, automatic focusing
Audio	Decoder	Support 2.1 sound output
	Built-in Mic	1
	Receiver	Not supported
	Speaker	Stereo Speaker
Interface	Headphone port	3.5mm
	Micro USB	1
	TF Card slot	1
	RJ45	Not supported
	USB	USB OTG 2.0
	UART port	Optional
Button	Power Switch	
G-Sensor	Optional	
Light- sensor	--	
Proximity sensor	--	
Gyroscope	Not supported (E-compass available)	
GPS	Optional	
Motor	Not supported	
GSM	GSM 850//1900 MHz, WCDMA 850/1900 MHz	
GPRS	GPRS, EDGE, HSPA	
Fingerprint	Sensor	Capacitive1/Capacitive2/optical
	Active Area	10.64mm×14mm/14.25*19.3 mm /16.26*24.38 mm
	Image size	256x288 /256x360/320x480
	Resolution	500dpi

Wireless	Wi-Fi	support
	Bluetooth4.0	support
	3G	support
Power	Battery	Li-polymer6000mAh/10000mAh
	AC supply	DC 5V/1.5A USB cable
OS (Operating System)		Android 4.4
Accessories		AC adapter
		USB Cable
Machine Weight		780g
Dimension		235mm*147mm*28mm
Extensive Function		Built-in QR decoder (Optional)
Operating Environment		Working temperature : 0°C~70°C
		Relative humidity≤90%
Temperature for Storage and Transportation		-40~60°C
EMC		★ ESD meets the third level condition of contact discharge formulated in table one of GB 17626.2
		★ RS meets the secondary conditions formulated in table one of GB 17626.3
RF Section Specification (Optional)		★ Antenna resonant frequency: 13.56MHz
		★ Antenna energy output:
		Antenna surface magnetic field strength (Hmax ≤7.5A/m (rms))
		Electromagnetic field intensity at the 3cm of the antenna surface normal direction (Hmin) ≥1.5A/m (rms)
		★ Modulation output :
		Bit rate: 106Kbit/s (fc/128)
		Modulation Mode: ASK Modulation
		Modulation index : 8%~14%
		Coding method: NRZ-L
		★Subcarrier modulation input :
		Subcarrier frequency (fs) : 847kHz
		Modulation subcarrier mode: BPSK
Valid reader distance:0~3cm		

QR code	Image sensor	752*480 CMOS
	illumination	Red Light LED 625±10nm
	identification code system	2Dbarcode PDF417, Data Matrix, QR Code; 1Dbarcode UPC/EAN, Code39, Code128, code93;
	Recognition view	Revolve 360*, incline ±50*, deflection ±50*
Second generation ID card	technical standard	Meet the standard of ISO/IEC 14443 type B, The General Technique Requirements of GA450-2003 Desktop Resident Identity Card Reader and the first revision list of The General Technique Requirements of the 1GA450-2003 Desktop Resident Identity Card Reader(draft).
	Reading time	<3s
	Reading distance	0~3cm
	Working rate	13.56MHz±7kHz

6. About the Battery

High-performance 6000mAh Li-polymer battery is installed in the terminal.

(1) Battery Life:

Up to 8 hours for continuous work, standby for a week.

(2) Charging Method:

Please charge your battery on time when the system warns. A full charge to 100% is necessary.

(3) Time for Charging:

A standard 6000mAh battery charge takes about 8-10 hours.

(4) Operating Notice

- a). The standby time is measured in an actual environment, but the specific standby time may vary in different areas. This is due to various factors.
- b). A rechargeable battery for the device can charge and discharge hundreds of times, but it will eventually wear out. When standby times are noticeably shorter than normal, replace the original battery.
- c). Disconnect the device and unplug charger after use.
- d). Enter system hibernation if no intend to use battery for long period. Battery should be kept in dry environment with full charge. Charge and discharge once every 3 to 6 months.
- e). Use designated battery for replacement.

7. Optional Genuine Accessories

- (1) USB data cable
- (2) AC adapter
- (3) Battery
- (4) Carapace

8. Simple Troubleshooting Guide

phenomenon	Cause	Operation
Abnormal Charge	Not full insertion of AC adapter into household outlet	Check plug insertion
	Poor contact of USB port	Ensure good contact of USB port
Heating	Normal phenomenon under service conditions	Avoid using in a too hot environment, or stop operation for a while
Crash	Malware running or BUG in running software	Press reset button, avoid malware in peacetime

9. Maintenance & Repair

- (1) Keep the device dry in case rain, humidity and all kinds of liquids or moisture containing minerals will erode electronic wires.
- (2) Avoid using and storing the device in dusty and dirty place in case detachable parts and internal electronic components damaged.
- (3) Do not put the device in a too hot place because high temperature shortens the life of electronic devices, destroys batteries, deforms and melts some plastic components.
- (4) Do not store the device in a too cold place. Or else when the temperature of the device rises (to normal temperature), humidity appears inside it then destroys circuit board.
- (5) Open the device in accordance with the manual, do not try other methods.
- (6) No throw, beat or vibration allowed, because that will damage the inner circuit board and its precision architecture.
- (7) Do not clean the device with strong chemicals, cleaning agents and strong detergents.
- (8) Do not paint the device because paints affect detachable parts work smoothly.
- (9) The charger is for indoor use only.
- (10) Capacitive touch panel designation, avoid extrusion with hard objects, scratch or rude touching in case touch panel fracture or failure.

(11) Power off while long time no use.

(12) Abnormal situation may happen due to increasing electromagnetic interference. Please reboot system after shutdown.

The suggestions above are applicable equally to the product, battery, charger and all accessories. If abnormal situation of any accessory happens, contact local authorized agent for replacement or maintenance.

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Manufacture : Aratek Biometrics Technology Co.,Ltd.

Model No.: BM7500

Address: 2F, T2-A Building, ShenZhen Software Park, South Area, Hi-Tech Park, ShenZhen, Guangdong, China

Website: www.aratek.com.cn

CE 0359

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▶ -Reorient or relocate the receiving antenna.
- ▶ -Increase the separation between the equipment and receiver.
- ▶ -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ▶ -Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information:

This GSM Mobile Phone meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

FCC RF Exposure Information and Statement

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: **BM7500** (FCC ID: 2AGUJ-BM7500) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.620W/kg. This device was tested for typical body-worn operations with the back of the handset kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 1cm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.