

# User Manual

## ZKBio710 Series

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English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



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If there is any issue related to the product, please contact us.

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To know more about our global branches, visit [www.zkteco.com](http://www.zkteco.com).

## About the Company

ZKTeco is one of the world's largest manufacturers of RFID and Biometric (Fingerprint, Facial, and Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

## About the Manual

This manual introduces the product of **ZKBio710 Series**.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

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# 1. Overview

## 1.1. Basic Features

- All-in-one solution.
- Support multiple CPU processor solutions (J1900/J6412/i3/i5).
- Main screen splash-proof design.
- Fashionable and simple design, color black + gray, white optional.
- Modular design.
- Built-in printer.
- Hidden and cluster cable management.
- Hand UV paint process.

## 1.2. Application Areas

- Retail convenience store
- Milk tea and fruit drink store
- Snack deli
- Fresh fruit store
- Fast food restaurant
- Food court

## 2. Appearance



Black + Gray (Standard)



VFD Guest Display (Optional)



9.7-inch Secondary Screen (Optional)



15-inch Secondary Screen (Optional)

## 3. Technical Parameters

### 3.1. Basic Technical Parameters

<b>Product Appearance Color</b>	Standard black + gray, optional white
<b>Operating System</b>	Windows 11/10/8/7 available
<b>Motherboard Solution</b>	Standard J1900 (original) Optional J6412 (original) Optional 6th generation I3 (disassembled) Optional 6th generation I5 (disassembled)
<b>Memory (Samsung Dismantled)</b>	Standard 4G DDR3 Optional 2G DDR3 /4G DDR4 /8G DDR3 /8G DDR4
<b>Solid State Drive (Longsys Original)</b>	Standard 64G SSD Optional 32G SSD/128G SSD/256G SSD
<b>Main Screen (Original)</b>	15" LCD (1024*768)
<b>Touch Screen (An-Touch)</b>	Multi-touch capacitive screen
<b>Printer (Icod)</b>	Standard built-in 80 USB
	Optional built-in 58 USB
<b>Secondary Screen</b>	Optional 15-inch sub-screen: 15-inch LED (1024 * 768)
	Standard with 8-bit digital display: LED-8
	Optional VFD: VFD-220
	Optional LCD: LCD-220 (122.8 * 22.5mm)
<b>Card Reader</b>	Optional magnetic stripe MSR: full three-track swipe card
	Optional ID: RFID card swiper
<b>Fingerprint Sensor</b>	ZKM101
<b>Scanner</b>	Optional VP8401 2D barcode scanning module
<b>Built-In WIFI (Optional)</b>	2.4ghz
<b>Appearance Size</b>	405*300*450 (mm)
<b>Product Weight</b>	Single screen: 5.4kg Double screen: 6.3kg
<b>Product Process</b>	Aluminum alloy, ABS material



### 3.2. Reliability Test Parameters

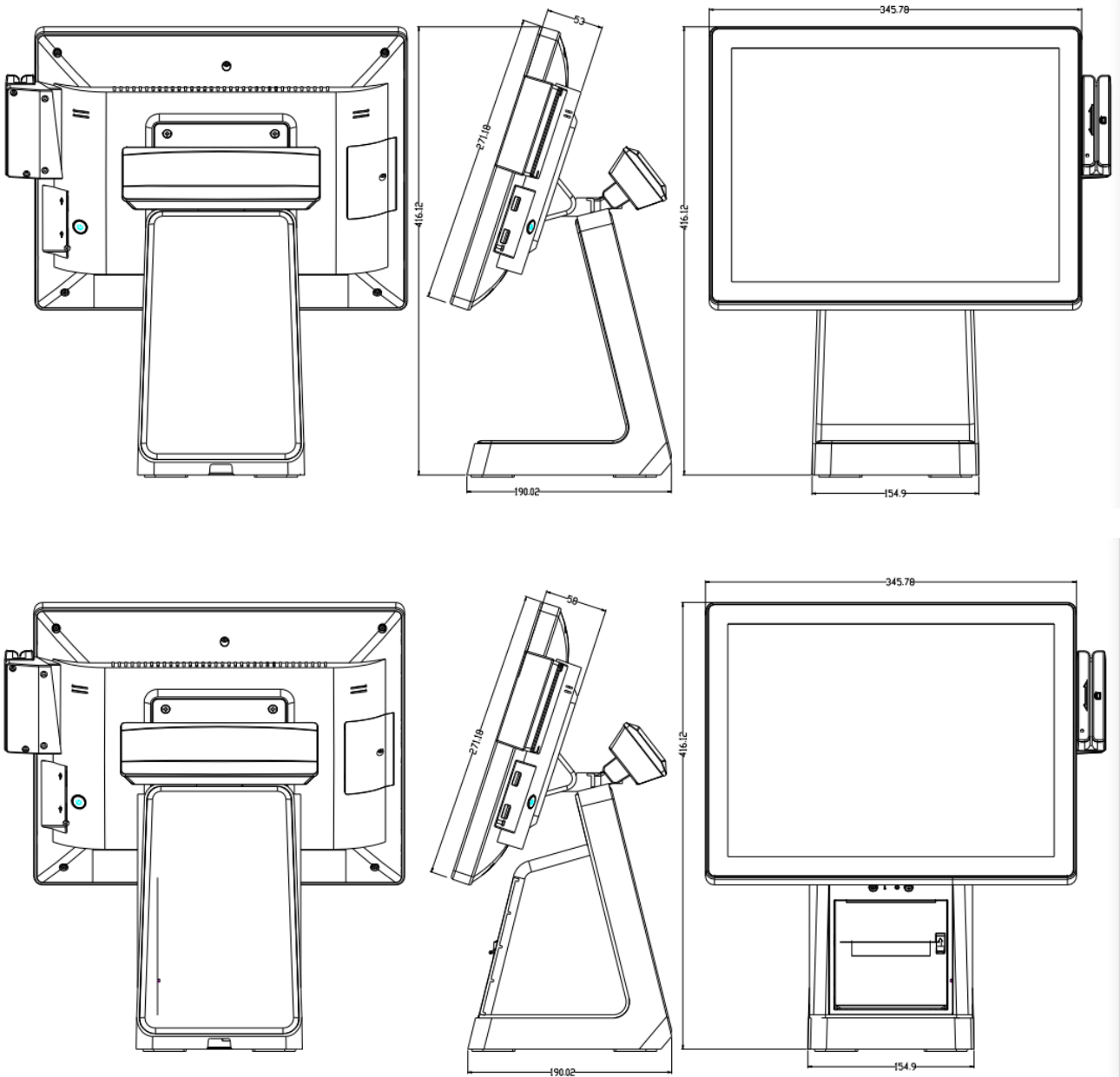
Technical Parameters	Content
<b>Environmental Requirements</b>	Working temperature and humidity: 0 to 50°C and 0 to 90%RH Storage temperature and humidity: -40 to 70°C and 0 to 90%RH
<b>Protection Level</b>	None
<b>Electrostatic Rating</b>	Contact ±4kV Air ±6kV
<b>Life Rating</b>	3000 hours MTBF

### 3.3. Technical Parameters of Key Components

Parameters		Performance
<b>LCD</b>	<b>Screen Size</b>	304*228 (mm)
	<b>Resolution</b>	1024*768
	<b>Brightness</b>	350 cd/m <sup>2</sup> (Typ.)
	<b>Viewing Angle</b>	Full view
	<b>Refresh Frequency</b>	60Hz
	<b>Signal System</b>	LVDS
	<b>Backlight Type</b>	WLED [12S4P]
<b>J1900 Motherboard</b>	<b>Samsung Memory</b>	Notebook memory slot 1pc, support DDR3L 1333MHz max 8GB
	<b>Hard Drive</b>	mSATA (2.0) 1pc, SATA 1pc
	<b>Sound Card</b>	Realtek ALC662
	<b>Ethernet</b>	Realtek RTL8106E network card chip 1pc. MINI PCI-E interface 1pc, support WIFI, 4G. DC12V 1pc, HDMI 1pc, VGA 1pc, RJ45 (1000m) 1pc, Line-out 1pc
	<b>USB</b>	USB 2.0 5pcs, USB 3.0 1pc
	<b>Motherboard Size</b>	146*102(mm)
<b>J6412 Motherboard</b>	<b>Samsung Memory</b>	Laptop memory slot 1pc, supports DDR4 3200MHz up to 32GB
	<b>Hard Drive</b>	MSATA(SATA3.0) 1pc, SATA 1pc
	<b>Sound Card</b>	Realtek ALC897
	<b>Ethernet</b>	Realtek RTL8106E network card chip 1pc, MINI PCI-E interface 1pc, support WIFI/3G/4G. DC12V 1pc, HDMI 1pc, VGA 1pc, RJ45 (1000m) 1pc, Line-out 1pc
	<b>USB</b>	USB 3.1 GEN2 4pcs, USB 2.0 2pcs
	<b>Motherboard Size</b>	146*102(mm)

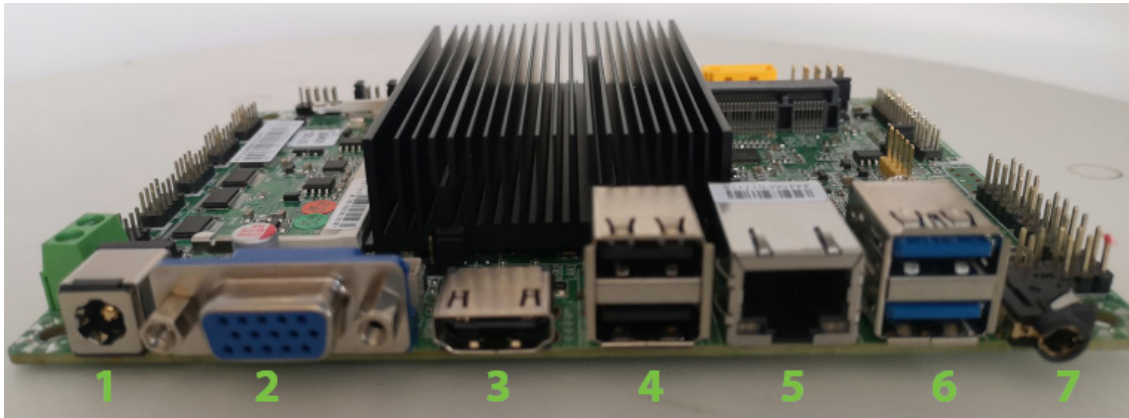
<b>6 Generation I3/I5 Motherboard</b>	<b>Samsung Memory</b>	Laptop memory slot 1pc, supports DDR4 2133MHz up to 32GB
	<b>Hard Drive</b>	MSATA(SATA3.0) 1pc, SATA 1pc
	<b>Sound Card</b>	Realtek ALC662
	<b>Ethernet</b>	Realtek RTL8106E network card chip 1pc, MINI PCI-E interface 1pc, support WIFI/3G/4G. DC12V 1pc, HDMI 1pc, VGA 1pc, RJ45 (1000m) 1pc, Line-out 1pc, MIC 1pc
	<b>USB</b>	USB 3.0 4pcs, USB 2.0 2pcs
	<b>Motherboard Size</b>	170*170(mm)
<b>CWT Adapter</b>	<b>Input</b>	100-240V~50/60Hz 1.7A
	<b>Output</b>	+12V $\overline{\text{---}}$ 5A
<b>Touch Screen</b>	<b>Model</b>	AC-1645(Main control IC: ILI2510)
	<b>Dimension</b>	354.1(L)*277.1(W)*2.7(H) mm
	<b>Viewing Area</b>	305.00(L)*229.00(W) mm
	<b>Drive Area</b>	307.00(L)*231.00(W) mm

## 4. Appearance Structure Diagram



## 5. Communication Interface

### 5.1. J1900 Motherboard



Side View of Motherboard Interface

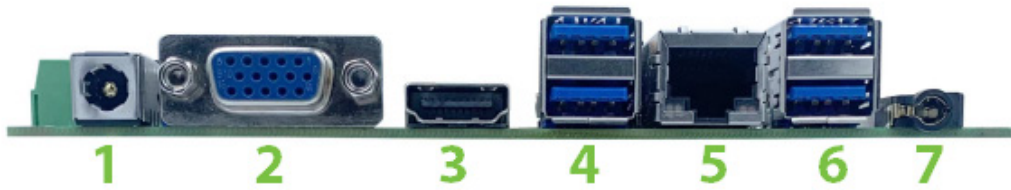


Front View of Motherboard Interface

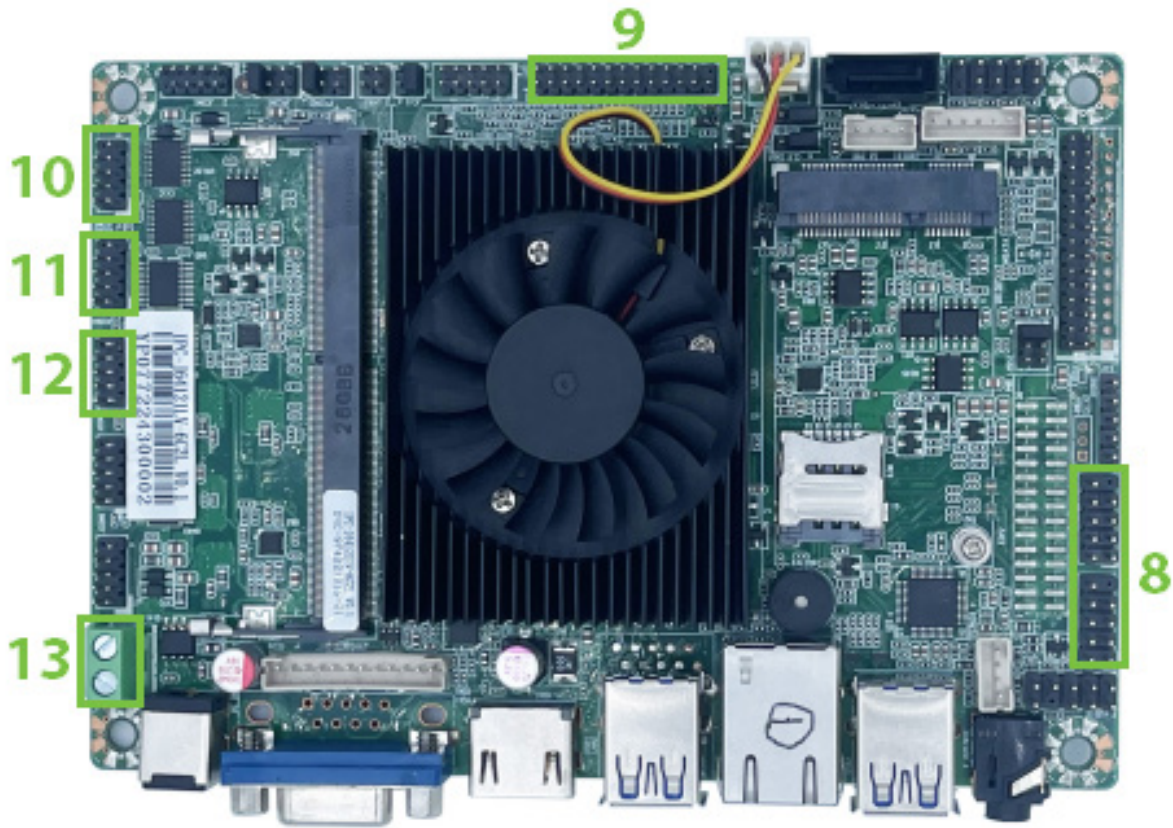
No.	Name	Definition
1	Power interface	DC 12V input
2	VGA interface	Analog signal display interface
3	HDMI interface	HD multimedia interface
4	USB interface	USB2.0

5	LAN interface	RJ45 Gigabit LAN port
6	USB interface	USB2.0/USB3.0 interface (lower)
7	Audio output interface	AUDIO OUT
8	Built-in USB pins	USB2.0
9	Parallel communication protocol expansion interface (optional)	LPT
10	Serial port expansion interface (secondary screen)	COM2 communication interface
11	Serial port expansion interface (optional)	COM3 communication interface
12	Serial port expansion interface (optional)	COM4 communication interface
13	Printer power supply	DC12V output

## 5.2. J6412 Motherboard



Side View of Motherboard Interface

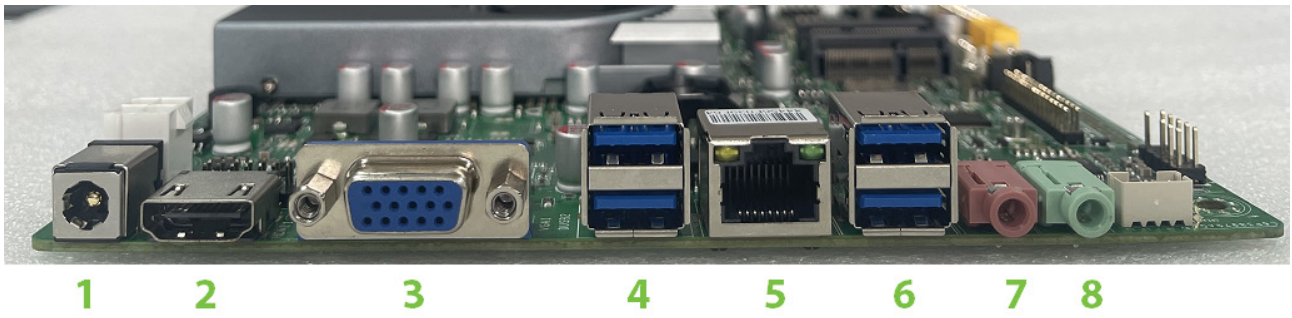


Front View of Motherboard Interface

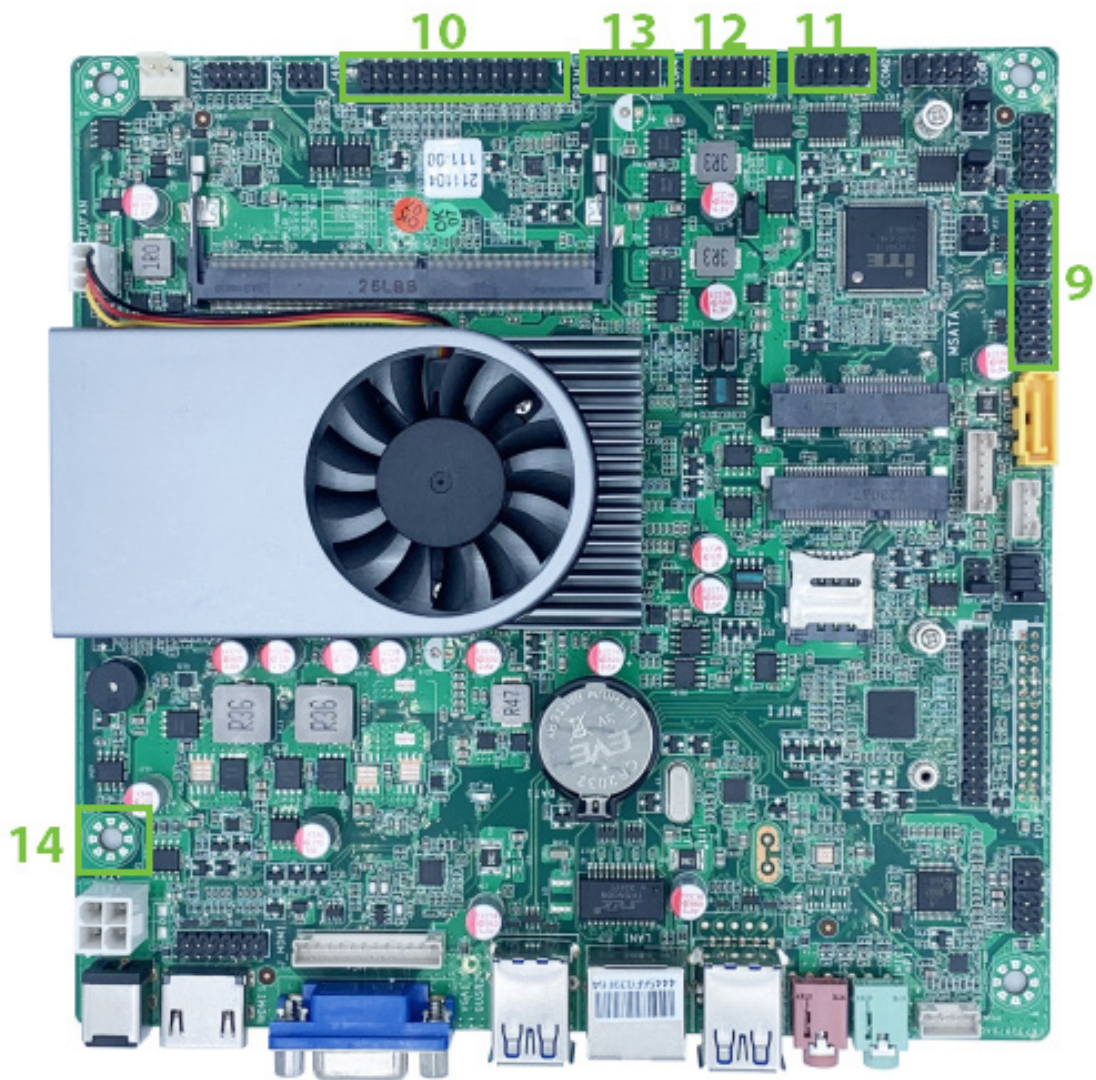
No.	Name	Definition
1	Power interface	DC 12V input
2	HDMI interface	HD multimedia interface
3	VGA interface	Analog signal display interface
4	USB interface	USB3.0 interface
5	LAN interface	RJ45 Gigabit LAN port
6	USB interface	USB3.0 interface
7	Audio output interface	AUDIO OUT

8	Built-in USB pins	USB2.0
9	Parallel communication protocol expansion interface (optional)	LPT
10	Serial port expansion interface (secondary screen)	COM2 communication interface
11	Serial port expansion interface (optional)	COM3 communication interface
12	Serial port expansion interface (optional)	COM4 communication interface
13	Printer power supply	DC12V output

### 5.3. 6 Generation I3/I5 Motherboard



Side View of Motherboard Interface



Front View of Motherboard Interface



No.	Name	Definition
1	Power interface	DC 12V input
2	HDMI interface	HD multimedia interface
3	VGA interface	Analog signal display interface
4	USB interface	USB3.0 interface
5	LAN interface	RJ45 Gigabit LAN port
6	USB interface	USB3.0 interface
7	Microphone input interface	MIC IN
8	Audio output interface	AUDIO OUT
9	Built-in USB pins	USB2.0
10	Parallel communication protocol expansion interface (optional)	LPT
11	Serial port expansion interface (secondary screen)	COM2 communication interface
12	Serial port expansion interface (optional)	COM3 communication interface
13	Serial port expansion interface (optional)	COM4 communication interface
14	Printer power supply	DC12V output

## 6. Physical Installation Instructions

1. Remove the front cover of the machine to access the printer installation position.
2. Align the printer into the installation position and attach it securely to the main body.
3. Connect the printer's connection cable to the motherboard correctly.
4. Attach the back cover to complete the installation.

## 7. Product Features and Operating Instructions

### 7.1. Printer

1. Press the printer open cover key to open the printer cover.
2. Put the thermal paper roll into the paper loading cavity and extend the paper beyond the rollers.
3. Cover the printer cover and make sure that the paper extends beyond the paper outlet, then the paper loading operation is completed.

### 7.2. Scanner


1. Fix the scanner on the installation position of the back cover.
2. Connect the scanner to the main board correctly.
3. Cover the back cover.

## 8. Supporting Software and Instructions for Use

Windows 11/10/8/7, Linux

Motherboard Model	Windows 7	Windows 10	Windows 11	Linux
<b>J1900</b>	○	○	×	○
<b>J6412</b>	×	○	○	○
<b>6 Generation I3/I5</b>	×	○	○	○

## 9. Packing List

Content	Quantity	Picture
Power Adapter	1 pc	
US Power Cord	1 pc	
UK Power Cord	1 pc	
EU Power Cord	1 pc	
ZKTECO Packing Carton Size: 450*320*470 (mm) Packing gross weight: Single screen: 5.4kg Double screen: 6.3kg	1 pc	

**Note:** Only one power cord is required according to the order.

## 10. Common Problems and Solutions

### 1. The machine does not start when it is turned on, and the power indicator does not light up.

#### **Problem:**

- 1) Check whether the socket is energized.
- 2) Check whether the power wiring of the machine is not tightly plugged.
- 3) Connected other USB devices externally.

#### **Solution:**

- 1) Test with other sockets.
- 2) If you have moved the machine, it is likely that the power cord is loose.
- 3) Power off and remove the USB peripherals and then power on.

### 2. No display on the secondary screen of the machine with dual screens.

#### **Problem:**

This problem tends to occur after installing the system.

#### **Solution:**

After the system is installed, the graphics card driver is not installed properly, resulting in the system not recognizing the secondary screen. The problem can be solved by installing all the mainboard drivers.

### 3. Touch screen no respond.

#### **Problem:**

- 1) Appears after installing the system.
- 2) Appears when dual display is set to extended display.

#### **Solution:**

- 1) It appears when the system enters the desktop for the first time after successful installation, the system has not yet recognized the touch controller, its driver has not been successfully installed, just restart the system once.
- 2) Open the Control Panel (W7 for example) - Tablet PC Settings - Display - Configuration - Settings, click the touch screen twice with your finger.

### 4. Unable to install the system.

#### **Problem:**

Common for W10 system cannot be successfully installed.

#### **Solution:**

The factory partition table format of the hard drive is MBR, some versions of the W10 system may not be installed successfully, just convert the MBR format to GPT format.

## 11. Cautions

1. Choose a suitable location for the machine that is away from direct sunlight, sources of eater and dusty environments and where temperature changes are minimal.
2. Please keep the machine away from strong electromagnetic fields.
3. In areas or stores with poor power grid quality, a regulated power supply should be provided to power the machine separately.
4. To avoid damage or malfunction, please handle the machine carefully and avoid shaking or hitting it forcefully.
5. Do not plug or unplug the machine's live parts and peripherals in a charged state, and do not move the machine or disassemble the internal components at will.
6. Please pay attention to keep the machine clean and protected from water, dust, and oil. When cleaning the machine, please use dry rags and avoid using wet rags or chemicals to wipe the body, such as: gasoline, thinner, etc.
7. In case of a malfunction, please turn off the power immediately and stop using the machine. Do not attempt to disassemble or repair the machine yourself. Instead, please contact our company for efficient maintenance treatment.
8. Regularly check that all wiring interfaces are secure and tight to prevent malfunctions or damage.
9. You will not be using the machine for a long time, please disconnect the power supply.

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