

# IOTBOX-3288A Commercial Box Specifications

## Document modification history

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# Contents

<b>Chapter 1 Overview .....</b>	<b>3</b>
1.1 IoTBox-3288A Scope of Application .....	3
1.2 Product Description .....	3
1.3 Features .....	3
1.4 Appearance and Interface Diagram .....	4
<b>Chapter 2 Product hardware indicators .....</b>	<b>7</b>
<b>Chapter 3 Power and Product Maintenance .....</b>	<b>9</b>
<b>Chapter 4 Notes for assembly and use .....</b>	<b>10</b>
<b>Chapter 5 Common Troubleshooting .....</b>	<b>12</b>

# Chapter 1 Overview

## 1.1 IoTBox-3288A Scope of Application

IoTBox-3288A belongs to Android industrial control box, which is generally applicable to smart display terminal products, video terminal products, industrial automation terminal products, such as: interactive advertising machines, interactive digital signage, smart self-service terminals, smart retail terminals, O2O smart devices, industrial control hosts, robots equipment, etc.

## 1.2 Product Description

IoTBox-3288A uses RockChip RK3288 Cortex-A17 quad core CPU, carries Android 7.1 system, main frequency up to 1.8GHz with super performance. It adopts Mali-T764 GPU and supports 4K 、 H.265 hard decoding. With multi-channel video output and input, rich interface, supporting multiple peripheral extensions, it is the best choice for human-computer interaction and industrial control projects, whether it is game, benchmark or decoding.

## 1.3 Features

- ◆ RAM and ROM can be configured according to customer needs.
- ◆ Support 12V power input.

- ◆ Support HDMI output, maximum support 3840x2160 4K decoding, support HDMI 4K dot screen.
- ◆ Support network port, WIFI, Bluetooth, built-in PCI-E 4G interface. Support a variety of PCI-E 4G modules such as Huawei, ZTE and Longshang, and supports Internet access.
- ◆ Rich extension interface, 2 USB ports(1\*USB OTG,1\*USB HOST).
- ◆ Multiple function keys ( 1\*power button , 1\*upgrade uboot button, 1\*customizable keys) .
- ◆ Support Android system customization, provide system call interface API reference code, perfect support customer upper application APP development.
- ◆ Perfect support for infrared, optical, capacitive, resistive, touch film and other mainstream touch screen, support non driver touch screen HID configuration without debugging.

## 1.4 Appearance and Interface Diagram

Front:



Back:



Back:



Product size chart:

## Chapter 2 Product hardware indicators

The Main Product Hardware Index	
Size	196*106*30mm
CPU	RK3288, quad-core, maximum frequency 1.8 GHz, Android 5.1/ 7.1
GPU	ARM Mali-T764 GPU High-performance GPU
Memory/storage	Standard 2G(4G optional)/Standard 16G(8/32/64G optional)
Built-in ROM	2KB EEPROM(not included by default, optional)
HDMI output	1, support 1080P@120Hz, 4kx2k@60Hz output
Video format	Support wmv、avi、flv、rm、rmvb、mpeg、ts、mp4, etc.
Picture format	Support BMP、JPEG、PNG、GIF
Headphone output	Support one way three-segment headset insertion
Audio input	Support one way MICIN
USB2.0 port	2*USB HOST
Ethernet	1, 10/100M Adaptive Ethernet
WIFI、BT	Built-in WIFI, <b>BT4.0</b>
3G/4G	Support PCI-E port 4G Internet and call (built-in) <b>optional</b>
SD card	Support SD Card

RTC real-time clock	Support
Timing switcher	Support
System upgrade	Support local SD,USB upgrade

# Chapter 3 Power and Product Maintenance

## 1. Power adapter

For your personal safety and the normal use of this product, please make sure that the AC power supply you provide meets the input information marked on the back of the product's power adapter; use a three-prong power socket with a reliable grounding terminal.

It is recommended to use the original power adapter of this machine. When the original power supply cannot be used under special circumstances, be sure to use the power adapter of the same specification.

## 2. Input characteristics

Input voltage range: from 90Vac-264Vac, one-way input.

	min	Rating	max
Input voltage	90Vac	100Vac-240Vac	264Vac
Input frequency	47Hz	60Hz/50Hz	63Hz

## 3. Output characteristics

Static Output Characteristics <Output & Ripple + Noise>

Output	specified load		Output voltage range	Ripple and noise	Remarks
	Min.	Max.			
+12.0V	0A	2A	+/-5%	50mVp-p	

## 4. Box input characteristics

Output	Rated load		Output voltage range	Ripple and noise	Remarks
	Min.	Max.			
+12.0V	0A	2A	+/-15%	50mVp-p	

## Chapter 4 Notes for assembly and use

Please read the instructions and safety instructions of this guide carefully and strictly follow them during use. This will help prevent damage to the computer mainframe, extend the life, ensure your normal use and computer maintenance, and ensure your life is safe.

1. Please read the relevant documents attached directly, if you have a folder, please be sure to read it first.
2. Follow all safety warnings and signs on this product.
3. Please use the original power adapter or only use the product according to the type of power supply indicated in this product.
4. In thunderstorms, please do not plug or unplug the network cable, power cord and other electrical conductors that may be connected to the outside world.
5. Unplug the power before cleaning the product. Do not use liquid, spray or wet cloth to clean.
6. In order to avoid damaging the operating system, motherboard and hard disk, do not press the power switch or reset key of the host continuously. Try to avoid sudden power failure and abnormal shutdown during operation. Do not move or shake the host when it is turned on. This can easily cause damage to the operating system or hardware.
7. Please do not disassemble the machine by yourself. Do not attempt to repair the product yourself. Please have this work done by an authorized professional.
8. Do not put the computer near the heat source, do not block the cooling hole of the host computer, and do not let the direct sunlight on your computer host.

9. Pay attention to moisture. Never spill water or other liquid on the computer. If the following conditions occur, immediately unplug the main unit. The following special circumstances need to be repaired by professional maintenance personnel.

- a. The power cord or plug is damaged.
- b. A conductive liquid is splashed into the product.
- c. The product has been dropped or the product casing has been severely damaged.
- d. Unexplained errors or significant performance changes in the product cannot be ruled out after regular failure guidelines.

# Chapter 5 Common Troubleshooting

IoTBOX-3288M commercial box products have been rigorously tested before leaving the factory. The products are durable and the problems encountered during use may be caused by the settings and operations encountered during your use. Or have some problems with device compatibility. This common troubleshooting information can help you resolve some simple operational issues in time or identify the cause of a repair failure.

1	The computer did not respond after booting	Please confirm that the host and monitor are powered normally and the host adapter is powered.
2	The host automatically shuts down for no reason	Please check if the power is off and the power adapter is loose.
3	The host automatically restarts without cause	Please check if the host is overheated and the system is normal.
4	Display image but no sound when playing video	Check if the audio output device is normal, mute, and whether the sound card driver is installed properly.
5	Network cannot connect	Check whether the network connection or routing device is normal, the network card driver is normal, the network parameter settings are normal, and confirm whether your ISP service is out of date.
6	External USB device is not recognized	Check if the function of the device is normal and the driver is installed normally.
<p>Note: 1) If the host accidentally enters water or infiltrates conductive liquid, please cut off the power immediately, wipe the liquid with a paper towel, and do not blow it with a hot air blower. If the situation is extremely serious, it is recommended to contact the after-sales service immediately for consultation or inspection.</p> <p>2) If the host machine slips down and causes deformation and damage to the main board, please contact the after-sales service immediately for repair.</p>		