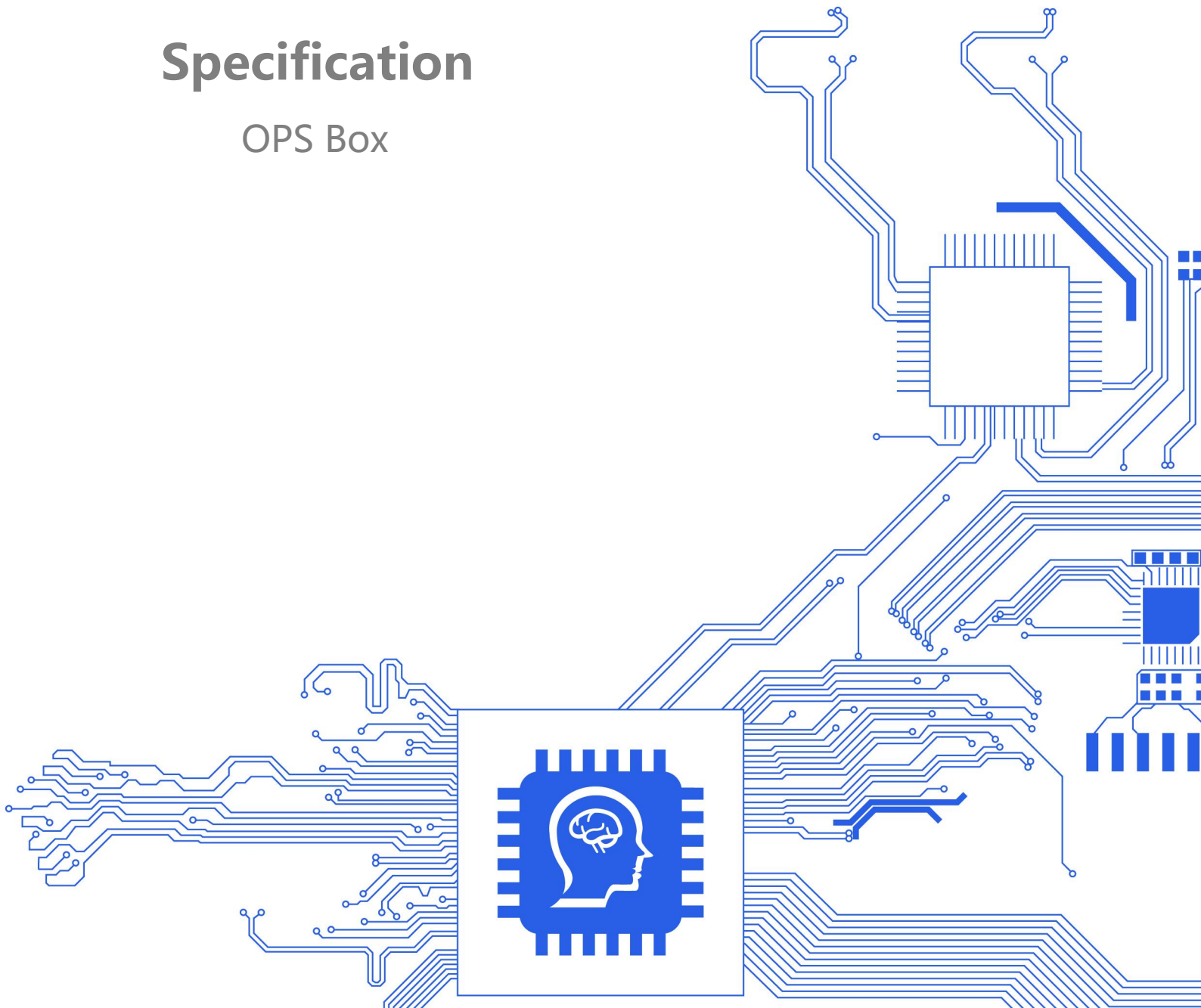


# OPS-3588A

## Specification

OPS Box



## Modification History

Version	Modified Content	Modified by	Verified by	Date
V1.0	Established	Teng Yiping	Qiu Shunfeng	2024-05-08

## Declaration

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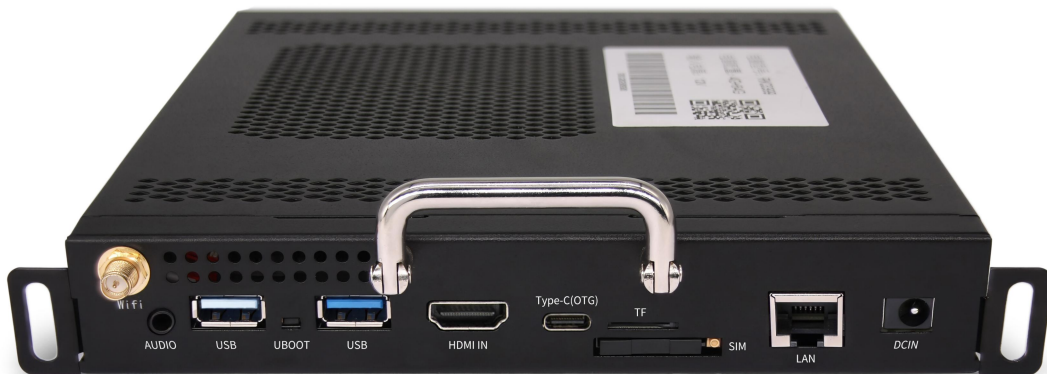
# Chapter 1 Product Overview

## 1.1 Scope of Application

The OPS-3588A is a high-end version of the OPS product, designed for ships, and it leads the industry in all aspects. It features a standard 80-pin interface and is equipped with an RK3588 eight-core processor, capable of running at up to 2.4GHz. The device includes a powerful AI accelerator (NPU) with up to 6T computing power, ensuring smooth performance even when running multiple applications simultaneously. By default, the product supports Android 12.0, and it can also run on Linux, OpenHarmony, and other operating systems, providing a secure, stable, and versatile system environment for terminal devices. It is widely used interactive teaching machines, electronic whiteboards, conference tablets, large-screen digital signage, and other similar devices.

## 1.2 Appearance and Interface Diagram

Appearance diagram:





**Interface diagram:**





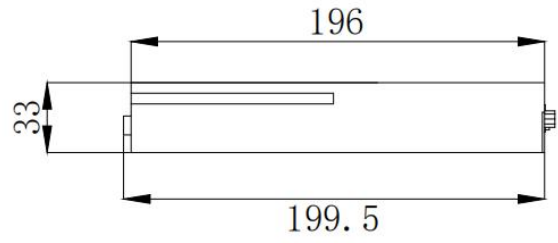
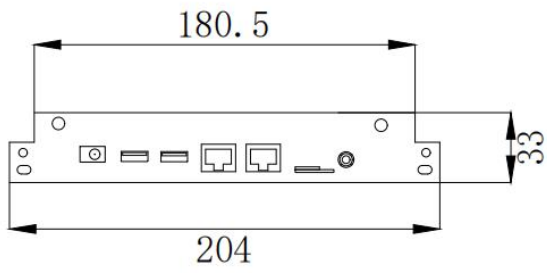
# Chapter 2 Product Specifications

## 2.1 Specifications Table

Product Parameters		
Core parameters	CPU	RK3588, 4-core 2.4GHz +4-core1.8GHz, with a maximum frequency of 2.4GHz.
	Local storage	32GB (optional 64/128GB)
	DDR memory	4GB (optional 8GB)
Network	WiFi	Inbuilt Wi-Fi, support hotspot sharing. (standard)
	Bluetooth	BT4.0
	4G	Support internet access by 4G modules (optional)
	Ethernet	2*10M/100M/1000M adaptive Ethernet.
	Antenna	1 SMA antenna interface: 4G antenna*1 WiFi antenna*1
External port	USB 3.0	Support 1*HDMI input.Support up to 4K@60Hz output
	USB 2.0	1*USB3.0 (limit current to 1.5A)
	Audio interface	1*USB2.0 (limit current to 1A)
	SIM card	Type-C
Internal port	USB 2.0	2 * LINE IN/ OUT, adapt 3.5mm, four-section earphone jacks
Electrical source	Input voltage	1*Nano-SIM card interface, support for various systems (depend on 3G/4G module) Nano SIM card size specification: 12mmx9mm Operative norm : ETSI TS 102 221 V11.0.0
	Static power consumption	6*USB2.0 (limit current to 1A)
	Fan	(optional) inbuilt PCI-E 4G module interface. Support a variety of PCI-E 4G modules such as Harmony, ZTE ,Support internet access.
Core parameters	CPU	DC 12~24V (±10%)
	Local storage	20W (TYP.)
	DDR memory	/
Environment parameter	Working temperature	0°C~60°C
	Working humidity	8%~90%RH, no condensation

	Storage temperature	-20°C~70°C, it is recommended to store at room temperature
	Storage humidity	10%~95%RH
Reliability	vibration protection	IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	surge guard	EC 60068-2-27, half sine wave, lasting 11ms
	EM Selectrostatic disturbance resistance	GB17626.2-2018 IEC61000-4-2 level 4 standard Contact discharge 4KV/air discharge 8KV
	EMS lightning surge	GB17626.5-2019 ±2KV
	Certification	ROHS
	Waterproof	/
	Appearance information	Size
Appearance color		Black shell
installation mode		Level surface placement or wall mounting
Packing list		box*1、instruction*1、certificate*1 (Actual shipment is more accurate.)

## 2.2 Product Size Diagram (Unit: MM)



## Chapter 3 Notes

Please read the instructions and safety matters of this guide carefully, and strictly implement them during the use. This will help prevent damage to the host machine, prolong the service life, ensure your normal use and host maintenance, and ensure your personal safety.

- Please read the relevant documents that are attached with the random document first. If there are inserts, please read them first.
- Follow all safety warnings and signs on this product.
- Please use the original power adapter or only the power type indicated for this product.
- In the case of thunderstorms, please do not plug or unplug network cables, power cables and other conductors that may be connected to the outside world.
- Please unplug the power before cleaning this product. Please do not use liquid, spray or wet cloth for cleaning.
- Please do not dismantle the machine without permission, and do not try to repair this product by yourself.
- Please have an authorized professional do this work.
- Do not place the host near a heat source.
- Pay attention to moisture protection, do not splash water or other liquids on the host, if the following situation occurs, please immediately unplug the power of the host.
- The following special conditions require professional maintenance personnel to repair.
  1. Power cord or plug damaged.
  2. Conductive liquid splashed into the product.
  3. Product drop or serious damage to product shell.
  4. The product has unknown errors or obvious performance changes, which cannot be eliminated after conventional troubleshooting.

**Statement**

- In case of any change in technical specifications, no further notice will be given. The company reserves the final right of interpretation for the instructions in this manual.
- The product may not work properly when it is exposed to strong radio interference (such as electromagnetic field, static electricity or line noise). Please ensure that the product is used in normal environment.



# Chapter 4 Common Troubleshooting

All products are rigorously tested before leaving the factory. They are durable and reliable. Problems you encounter during use may be due to settings or operations you have set up. Or they may be due to device compatibility issues. This troubleshooting guide helps you quickly resolve simple operational issues or identify the causes of maintenance issues.

1	The host does not enter the system after starting up.	<ol style="list-style-type: none"><li>1. Please confirm that the power supply of the host and monitor is normal, and whether the host adapter is powered on.</li><li>2. Check whether the status indicator is correct.</li><li>3. Some models require a button to start up.</li></ol>
2	The host shuts down automatically for no reason.	<ol style="list-style-type: none"><li>1. Check whether the power supply is disconnected and whether the power adapter is loose.</li><li>2. Whether to set the timer on and off.</li><li>3. Whether the application terminal is turned off actively.</li></ol>
3	The host restarts automatically for no reason.	Check whether the one-key restore button is located near the outside of the board (normally it should be near the inside of the board).
4	The host restarts automatically for no reason.	Check that the audio output Settings are matched (Codec/HDMI) and whether it is muted or not.
5	The network is not connected.	Check whether the network connection or router is normal, and whether the network parameter setting is normal.

## Note:

1) If the host accidentally gets water or conductive liquid, please immediately cut off the power supply and dry the liquid with paper towels. Do not use a hot hair dryer. In case of serious situation, it is recommended to contact the after-sales service for consultation or send it for inspection and maintenance immediately.

2) If the mainframe slips and causes the shell deformation and damage, or the motherboard is damaged, please contact the after-sales service immediately for maintenance.