Manuals+ — User Manuals Simplified.

Vantron IBOX66 Embedded Industrial Computer Instruction Manual

Contents

Vantron IBOX66 Embedded Industrial Computer

Product Brief Introduction

Vantron IBOX66 is a multi-functional embedded industrial computer designed for smart businesses. Running the latest Android 11 operating system, the high-performance industrial computer is GMS-certified to enable customers to have unimpeded access to Google mobile services. IBOX66 is running on RK3566, a cost-effective multi-core processor developed by Rockchip. With 4GB memory and 32GB eMMC storage, it features quick access to data and ultra-large capacity. As such, it is capable of dealing with huge volume of data in a timely manner. As IBOX66 provides rich interfaces, a wide choice of peripherals can be connected for extended applications, including barcode scanners, cameras, barcode printers and keyboard plates. It also supports ultra-high-definition video outputs thanks to the high-performance video engine coupled with H.265 (HEVC) hardware decoding and 1080p/2K video decoding. Moreover, display interfaces of different specifications allow flexible application of the device in intelligent retailing, new retailing, financial self-service terminals, and other scenarios.

Exterior and Features

IBOX66

RK3566, Rockchip new generation processor

4GB Memory and 32GB Storage

Android 11, GMS certified

eDP/LVDS/MIPI interface for display

5 x USB, 2 x RS485, 2 x RS232/485

Wi-Fi/BT/4G/ETH for communication

Connectivity to Vantron Bluesphere for real-time tracking

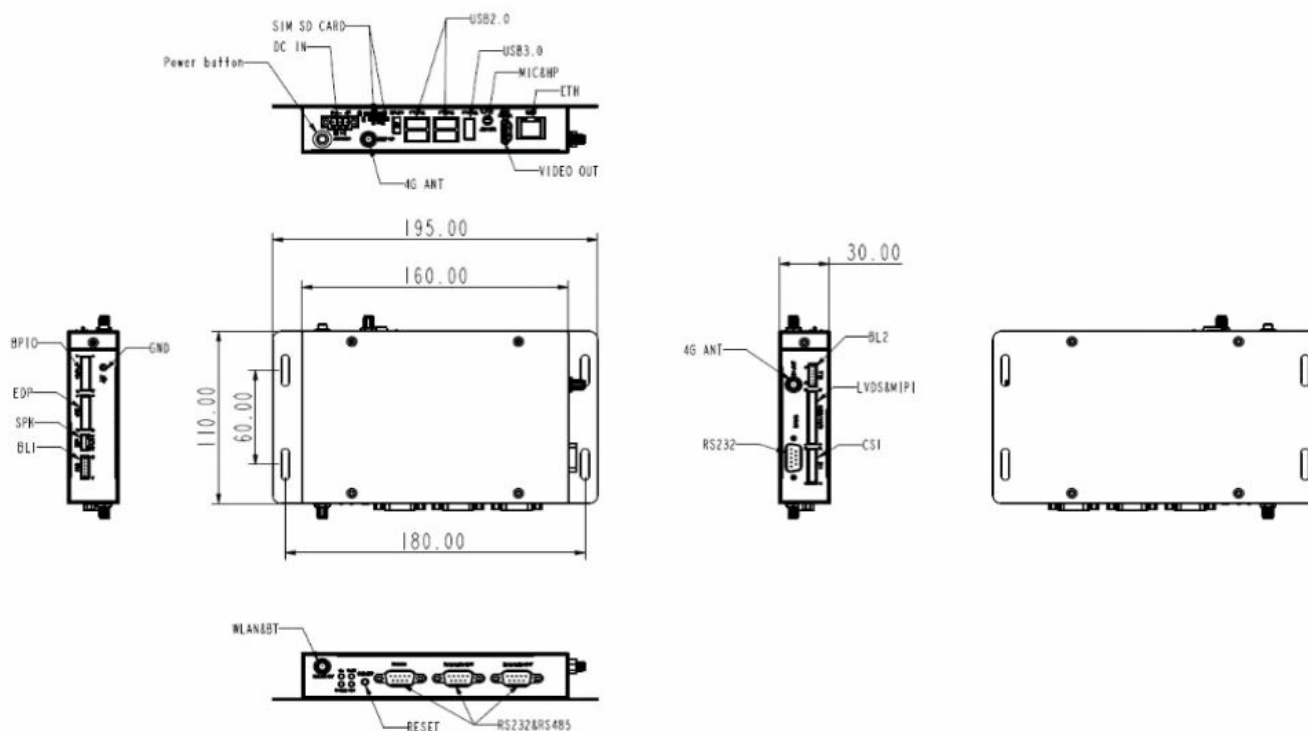## IBOX66 Embedded Industrial Computer Datasheet

IBOX66		
	CPU	Rockchip RK3566, Quad-core, ARM Cortex-A55, 1.8GHz (Max)
	Memory	4GB (Optional: 2GB)

System		
	Storage	32GB (up to 128GB) 1 x Micro SD card slot (up to 128GB)
Communication	Ethernet	1 x RJ45, 10M/100M/1000Mbps
	4G LTE (AT&T, Verizon)	Optional
	Wi-Fi & Bluetooth	Wi-Fi 802.11 a/b/g/n/ac + BT 5.0
Media	Display	1 x HDMI, Type-A 1 x 4-lane eDP, 2560 x 1600 @60Hz 1 x 8-lane MIPI DSI (including 4 lanes multiplexed as LVDS), single-channel MIPI DSI: 1920 x 1080 @60Hz, LVDS: 720P @60Hz; dual-channel MIPI DSI: 2560 x 1440 @60Hz
	Audio	1 x 3.5mm Combo audio jack
	Speaker	1 x Speaker connector
	Camera	1 x MIPI CSI-2, 2 x 10 x 2.0mm
I/Os	Serial port	2 x RS232, DB9 Connector 2 x RS232/RS485, DB9 Connector
	USB	4 x USB 2.0 Type-A (USB OTG supported) 1 x USB 3.0
	SIM slot	1 x SIM card slot
	GPIO	8 x GPIO, 3.3V
	Watchdog	Supported
	RTC	Supported
Expansion	Mini-PCIe	1 x Mini-PCIe for 4G LTE module
System Control	Button	1 x ON/OFF button 1 x Reset button
	LED	1 x Power LED (Red) 1 x System LED (Green) 1 x 4G LED (Green) 1 x User defined (Green)
Software	OS	Android 11, GMS certified (Optional: Linux OS)
	Device management platform	BlueSphere MDM (Android devices only)
	OTA tool	BlueSphere OTA
	Input	12V/24V 3A DC (±5%), 1 x 3 x 3.81mm

Power	Consumption	15W
Mechanical	Dimensions	160mm x 110mm x 30mm (Enclosure only) 195mm x 110mm x 30mm (With mounting bracket)
	Weight	680g
Environment Condition	Temperature	Operating: 0℃~+60℃ Storage: -40℃~+85℃
	Humidity	Operating: RH 5%~95% Storage: RH 5%~95%
	Certification	FCC ESD: ±4KV (contact) and ±8KV (air)

Product Outlines

Accessories and Order Information

Accessories				Order Info	IBOX66	
IBOX66	Power cable	1 pc		-x	-1: 2GB RAM / -2: 4GB RAM	
	Adapter	1 pc		-xx	-x1: 16GB eMMC / -x2: 32GB eMMC	
					-x3: 64GB eMMC / -x4: 128GB eMMC	
	Wi-Fi/Bluetooth antenna	1 pc		-xxx	-xx0: Without 4G / -xx1: With 4G	
				-xxxx	-xxx0: GMS not certified; -xxx1: GMS certified	
	4G antenna (Optional)	2 pcs		Example	IBOX66 -2201: 4GB RAM, 32GB eMMC, not supporting 4G, GMS certified	

Company Profile

Since 2002 established by two Silicon Valley entrepreneurs, Vantron Technology has been a pioneer in connected IoT devices and IoT platform solutions. Today, Vantron serves countless customers all over the world, some of them are Fortune 500 companies. Product lines cover edge intelligent hardware, IoT communication devices, industrial displays and the BlueSphere cloud device management platform. Vantron has 20 years of experience in R&D of embedded edge intelligent hardware like SOM board and motherboard and provided users with various embedded solutions with ARM and X86 architecture. From Linux to Windows, from embedded to desktop level, from gateway to server. At the same time, we provide our users with system clipping, driver transplantation and other services. Vantron IoT communication devices support multi-protocol connection of industrial equipment, and edge computing of local data. Abundant wired and wireless connectivity make remote operations and maintenance possible. From electricity and transportation to smart retail, medical and warehousing, Vantron IoT communication device can be deployed anywhere in any business section. Vantron believes its IoT solution to help many companies finish their digital transformation, efficiency of manufacturing and productivities have been improved significantly. Vantron industrial display systems, ARM and X86 series, are equipped with Rockchip, NXP, MediaTek, Intel and other high-performance processors. It supports various operating systems such as Windows, Linux, and Android. Diverse wireless communications keep your device online all the time. Multiple installation methods make it suitable for a variety of application scenarios. Features like waterproof, dustproof, and shatter resistant guarantee the best performance in any environment. Vantron BlueSphere device management platform, a software product, is playing a big role in Vantron's overall IoT solution. Today, Vantron puts more focus on offering complete cost-effective, leading-edge yet reliable solutions to help customers carry out their visions.

- IBOX66 V2.9 © 2023 Vantron Technology, Inc. All rights reserved. Vantron Technology, Inc. reserves the right to update or modify this document at any time without prior notice.
- **www.vantrontech.com**

Documents / Resources

Vantron IBOX66 Embedded Industrial Computer [pdf] Instruction Manual
IBOX66 Embedded Industrial Computer, IBOX66, Embedded Industrial Computer, Industrial Computer, Computer

References

- Vantron **Vantron Technology**