InHand Networks

AI Edge Computer with
High-performance, on-device computing,
reliable and stable, with a rich set of AI capabilities

EC3300 series

Real-time local decision-making, and rapid responsiveness， Enhanced data security protection

With the evolving technologies and increasing applications, the demand for local computing is growing. In industries like manufacturing, security, and healthcare, there is a need for high-performance data processing and real-time decision-making at the local level. Traditional cloud computing may not be suitable due to latency and data security concerns.

To address this, InHand Networks has designed an AI edge computing device with a high-performance processor and NPU. It provides fast data processing, real-time decision-making, and enhanced data privacy. The EC3300AI edge computer offers improved performance, data privacy, and faster response in manufacturing, security, and healthcare applications.

The EC3300 series is suitable for various AI scenarios that require on-device computing power:

Smart Commerce	– Commercial video surveillance – Smart robots
Smart Energy	– Distributed energy management – Smart charging stations
Smart City	– Intelligent traffic management – Intelligent security detection
Smart Manufacturing	– Automation in production and control – Real-time security monitoring
Smart Healthcare	– Medical image analysis – Real-time monitoring and early warning

Application Diagram

Features and Advantages

+ Available with 4G, Wi-Fi, and Bluetooth connectivity.
+ Octa-core processor with a maximum frequency of 2.4GHz.
+ Offers 6TOPS computational power.
+ Compatible with various AI frameworks
+ 8GB RAM and 32GB storage.
+ Dual HDMI ports, dual-display output.
+ Up to 8K display.
+ One Gigabit Ethernet port.
+ Comes with three communication serial ports.
+ Provides four USB 2.0 ports and one USB 3.0 port.
+ Encased in a metal shell with an IP40 protection rating.
+ EMC Level 3.
+ Wide temperature range of –20° C to 70° C.

Eight-core processor, fearless in complex computing tasks.

EC3300 is equipped with an eight-core processor, enabling effortless handling of complex computational tasks and providing efficient computing capabilities. Customers can experience greater speeds and higher efficiency when processing large-scale data, complex algorithms, and multitasking, resulting in time savings and improved work efficiency.

6TOPS ultra-high computing power, compatible with various AI frameworks

The EC3300 has 6T of ultra-high computing power, Support INT4/INT8/INT16/FP16 mixed computing, compatible with various AI frameworks such as TensorFlow / MXNet/PyTorch/Caffe， Enabling fast execution of various AI applications, including machine learning, image recognition, and speech processing. It helps customers achieve more accurate results in areas such as intelligent decision-making, data analysis, and model training, facilitating intelligent business optimization and innovation.

Dual HDMI, with a maximum 8K display output.

The EC3300 is equipped with dual HDMI interfaces and supports a maximum 8K display output, providing customers with excellent image quality and visual experience. It also supports dual-screen extended display, allowing customers to enjoy clear, detailed, and realistic image presentations in various scenarios such as digital advertising displays, surveillance systems, virtual reality applications, and entertainment media playback. This enhances user experience and visual effects.

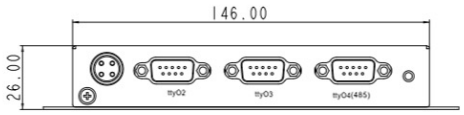
"Always online" for a worry-free internet experience.

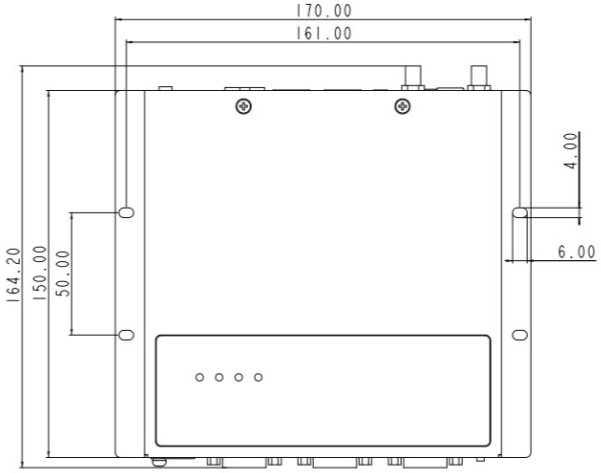
Enhanced network stability ensures uninterrupted device connectivity, eliminating disruptions caused by network outages or failures. This provides customers with a reliable network environment, ensuring timely data transmission and dependable remote management. Whether it's remote monitoring, data uploading, or cloud service applications, customers can enjoy a worry-free network connection, enhancing work efficiency and convenience.

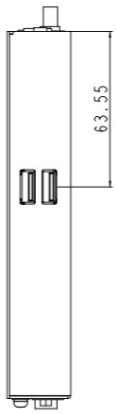
Industrial-grade design for long-lasting and stable operation.

The EC3300 is designed with an industrial-grade design, ensuring durability and reliable operation in various challenging industrial environments. This means that customers can rely on the device's robustness and stability, reducing the costs associated with repairs and replacements. The long-lasting and stable performance of the product guarantees a reliable and dependable working partner, providing customers with long-term investment protection.

Dimensions







Specifications

EC3300 Hardware Specifications			
item	EC3300		
Hardware Platform			
CPU	Rockchip's octa-core processor operates at a maximum frequency of 2.4GHz.		
GPU	Quad-core Mali-G610 MC4 high-performance GPU		
NPU	6TOPS NPU Support INT4/INT8/INT16/FP16 mixed operation Compatible with various AI frameworks such as TensorFlow / MXNet / PyTorch / Caffe		
Memory	8GB		
FLASH	32GB		
Interfaces			
Serial Port	RS232 × 3, or RS232 × 2+RS485 × 1		
Power Interface	12V DC-input × 1 (self-lock four-core circular interface)		
USB	USB 2.0 × 4, USB 3.0 × 1，1.5A		
SIM Card Slot	Drawer-type card holder × 1		
SD Card Slot	SD card slot × 1		
4G Antenna Interface	SMA × 1		
Wi-Fi Antenna Interface	RP-SMA × 1		
Ethernet	10/100/1000Mbps × 1		
HDMI	HDMI *2 (can support 4K video output at the same time), Adjustable resolution, with audio output;		
8K	Single HDMI output up to 8K		
Debugging Interface	Type C Interface *1;		
Button	Power *1； Mode *1；		
Mechanical Features			
Installation	Wall mounting	Protection Rating	IP40;
Housing	Metal	Cooling	Fan-less cooling
Dimensions	17cm * 15cm * 2.6cm ;		
Ambient Temperature and Humidity			
Storage Temperature	-40 ~ 85℃	Ambient Humidity	5 ~ 95% (non-condensing)
Operating Temperature	-20~ 70℃		
Indicators			
Power Indicator	Indicator of power supply, on when power on		
Status Indicator	Indicator of operation status, flashes when operating normally		
Wi-Fi Indicator	Indicator of Wi-Fi connection, on when connected		
3G/4G Indicator	Indicator of 3G/4G network connection, on when connected		
EMC			
ESD	Level 3	Surge	Level 3
EFT	Level 3		
Other			
Real-time Clock (RTC)	Embedded real-time clock (RTC), power supply with Button batteries		
Audio	HDMI audio output		
Power Consumption	Less than 12W(without peripherals)		
Certification	None		

EC3300 Software Specifications	
item	EC3300
Software Support	
Operating System	Android12
Application Software	Applications compatible with Android OS
Network Functions	
Network Type	4G full netcom
Wi-Fi	802.11b/g/n, supports Client/AP mode
Bluetooth	Bluetooth 4.0
Graphic Processing	
Processing Capability	The device is equipped with a maximum 48-megapixel ISP (Image Signal Processor), which enables accelerated processing of various algorithms such as HDR, 3A (Auto Exposure, Auto Focus, Auto White Balance), LSC (Lens Shading Correction), 3DNR (3D Noise Reduction), 2DNR (2D Noise Reduction), sharpening, defogging, fisheye correction, gamma correction, and more.
Video Codec	It supports H.265 and VP9 decoders for 8K@60fps video playback, an H.264 decoder for 8K@30fps video playback, and an AV1 decoder for 4K@60fps video playback. It also features H.264 and H.265 encoders for 8K@30fps video encoding, a high-quality JPEG encoder/decoder, dedicated image pre-processing, and post-processing capabilities.
Image Processing	BMP, JPG, PNG, GIF
Configuration	
Timed On/Off	Supported
Upgrading	
System Upgrade	Local USB upgrade

Ordering Guide

model	Model code: InBOX710-<WMNN>-<STD/PLAT/L>-<A>-<S>			
	Region (Operator)	<WMNN>: Cellular Networks	<STD/PLAT/L>: OS	<S>:Serial port type
EC3300-DQ20-STD	China	LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41 WCDMA: B1/B8 TD-SCDMA: B34/B39 CDMA/EVDO: BC0 GSM/EDGE: 900/1800MHz	STD: Android12	<NA>: RS232*3
EC3300-DQ20-STD-485	China	LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41 WCDMA: B1/B8 TD-SCDMA: B34/B39 CDMA/EVDO: BC0 GSM/EDGE: 900/1800MHz	STD: Android12	485: RS232*2 RS485*1
EC3300-FQ58-STD	EMEA South Korea Thailand India	LTE-FDD B1/B3/B7/B8/B20/B28A WCDMA B1/B8 GSM/EDGE B3/B8	STD: Android12	<NA>: RS232*3
EC3300-FQ58-STD-485	EMEA South Korea Thailand India	LTE-FDD B1/B3/B7/B8/B20/B28A WCDMA B1/B8 GSM/EDGE B3/B8	STD: Android12	485: RS232*2 RS485*1
EC3300-FQ39-STD	North America	LTE-FDD B2/B4/B5/B7/B12/B13/B25/B26/B29/B30/B66 2×CA B2+B2/B5/B12/B13/B29; B4+B4/B5/B12/B13/B29; B7+B5/B7/B12/B26; B25+B5/B12/B25/B26; B30+B5/B12/B29; B66+B5/B12/B13/B29/B66 WCDMA B2/B4/B5	STD: Android12	<NA>: RS232*3
EC3300-FQ39-STD-485	North America	LTE-FDD B2/B4/B5/B7/B12/B13/B25/B26/B29/B30/B66 2×CA B2+B2/B5/B12/B13/B29; B4+B4/B5/B12/B13/B29; B7+B5/B7/B12/B26; B25+B5/B12/B25/B26; B30+B5/B12/B29; B66+B5/B12/B13/B29/B66 WCDMA B2/B4/B5	STD: Android12	485: RS232*2 RS485*1

About Us

InHand Networks is a global leader of Industrial IoT, with a record of tremendous success following groundbreaking innovation since our inception in 2001.

InHand serves world-class partners and customers with industrial M2M routers, gateways, industrial Ethernet switches, rugged computers and IoT management platforms. We provide IoT solutions for various vertical markets including Smart Grid, Industrial Automation, Remote Machine Monitoring, Smart Vending, Smart City, Retail and more.

Proudly bearing the marks of both Rockwell Automation Technology Partner in Asia-Pacific and Schneider Electric Technology Partner, InHand Networks defines industrial innovation and reliability.

InHand Networks

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