



# iHC-3568JGW

Industrial 5G smart gateway



V1.2 2024-9-9

T-CHIP INTELLIGENCE TECHNOLOGY

# Product features



## Quad-core 64-bit processor

It is RK3568J with a quad-core 64-bit Cortex-A55 processor. 22nm advanced technology, main frequency up to 1.4GHz, low power consumption and high performance.



## Powerful network communication function

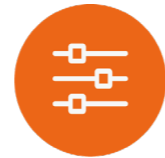
It supports 5G/4G mobile network, dual-channel Gigabit Ethernet and other network communication methods, with stable communication and faster speed, and adapts to the needs of various scenarios.



## Wide temperature operation, stable operation

Using industrial-grade processors and components, supporting 9V~36V wide voltage, anti-static, anti-surge, industrial-grade fanless design, -40°C~85°C wide temperature operation, 7×24 hours of stable operation, to meet the needs of industrial-grade applications.

# Product features



## Abundant expansion interfaces

It has 2 × RS485, 1 × CAN, 2 × RS232, 1 × UART, 2 × DIN (opto-decoupled isolation), 2 × DOUT (relay interface) and other expansion interfaces, with strong data acquisition and transmission capabilities.



## Support for Openwrt system

It supports Openwrt system and multiple network protocols (HTTP/TCP/UDP/NEBSOCKET), which is suitable for IoT PLC data acquisition and control scenarios.



## Wide range of application scenarios

Industrial routing, IOT Internet of Things, smart meters, smart cities, smart factories, power collection, industrial automation, remote monitoring and other industrial fields.

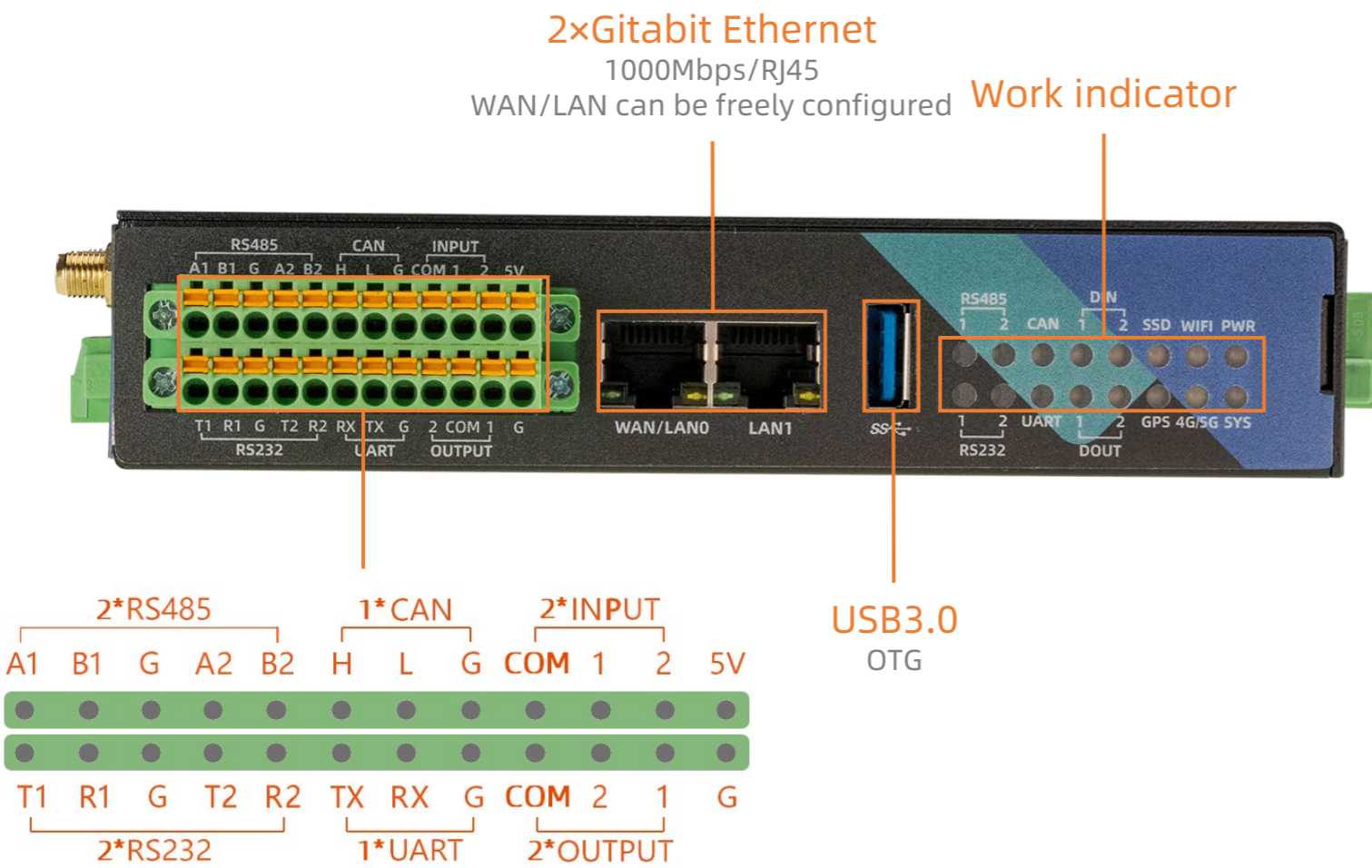
# Specifications



Specification		
Basic Specifications	SOC	RK3568J, Quad-core 64-bit Cortex-A55 processor, 22nm advanced technology, up to 1.4GHz
	NPU	RKNN NPU AI Accelerator, the computing power can reach 512MAC, supports One-click conversion of Caffe/TensorFlow/TFLite/ONNX/PyTorch/Keras/Darknet architecture models
	VPU	4K@60fps H.265/H.264/VP9 video decoding, 1080P@60fps H.265/H.264 video encoding
	Storage	LPDDR4 (2GB/4GB/8GB)
	RAM	eMMC (8GB/16GB/32GB/64GB/128GB), SPI Flash (16MB)
	Expand storage	1 × TF Card Slot, 1 × M.2 NMVe SSD (2242/2260/2280 optional)
	Power	DC 12V (Wide voltage 9V~36V, 3Pin-5.08mm Phoenix Terminal)
	Power consumption	Max: 8.4W(12V/700mA), Normal: 4.2W(12V/350mA)
	OS	OpenWRT
	Size	179.15mm × 110.15mm × 31.65mm
	Weight	≈ 610g
	Environment	Operating Temperature: -40°C ~ 85°C, Operating Humidity: 10% ~ 90%RH (non-condensing)
Interface Specifications	Ethernet	2 × Gigabit Ethernet (1000Mbps/RJ45)
	WiFi	2.4GHz WiFi, IEEE802.11b/g/n standard, BT5.0 (support BLE), 4G LTE Cat1 (Mini PCIe) (optional), 5G (M.2) (optional)
	Network protocols	It supports multiple network protocols (HTTP/TCP/UDP/WEBSOCKET) and is suitable for IoT PLC data acquisition and control scenarios
	GPS	Support GPS positioning (optional), field devices around the world can be real-time positioning, tracking, tracking, time calibration (synchronized in Coordinated Universal Time (UTC))
	Display	1 × HDMI2.0 (4K@60fps)
	USB	1 × USB3.0 (OTG)
	RTC	Support RTC
	Watchdogs	It supports watchdogs, and has the ability of automatic fault detection and automatic recovery
	Other interface	2 × RS485, 3 × RS232, 1 × CAN, 1 × UART, 2 × DIN (Opto-Coupled Isolated I/O), 2 × DOUT (Relay)
Button	1 × Recovery, 1 × Power button	



# Interface description



DC 9-36V wide voltage input  
3Pin-5.08mm phoenix terminal

WiFi antenna GPS antenna



TF-Card  
SIM Card

**Reset key**  
Short press (less than 5 seconds), the device will restart;  
Press and hold for about 5 seconds, and the device will restore the default web login password;  
Press and hold for about 10 seconds, and the device will factory reset and restart;  
Press and hold for about 15 seconds, and the device does not perform any recovery operations;

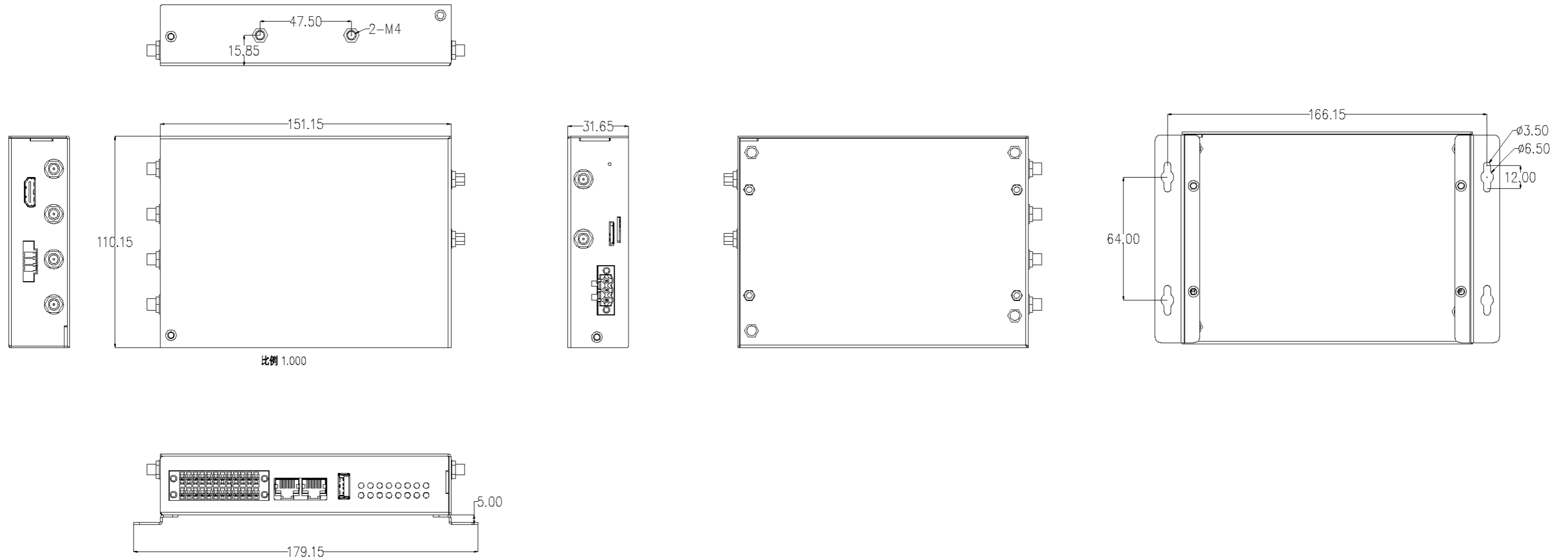
4G/5G antenna 5G antenna



HDMI2.0  
4K@60fps

RS232

# Dimension





## T-CHIP INTELLIGENCE TECHNOLOGY

---



Contact Us  
(+86)18688117175



E-mail  
[global@t-firefly.com](mailto:global@t-firefly.com)



Website  
[www.t-firefly.com](http://www.t-firefly.com)



Address  
Room 2101, Hongyu Building, #57 Zhongshan 4Rd, East District,  
Zhongshan, Guangdong, China.