Smart 3000
AI BOX edge intelligent terminal

Overview

Smart 3000 AI BOX is a powerful and stable edge intelligent terminal equipped with an AI intelligent processing chip and embedded with mature algorithms based on deep learning. Smart 3000 AI BOX is paired with Hongdian self-developed OSDT system and integrated with Hongdian self-developed AI algorithm model, and can be widely used in scenarios such as smart power, smart transportation, smart construction, smart gas, etc.

Highlights

Rk3588 high-performance chip with 6T computing power

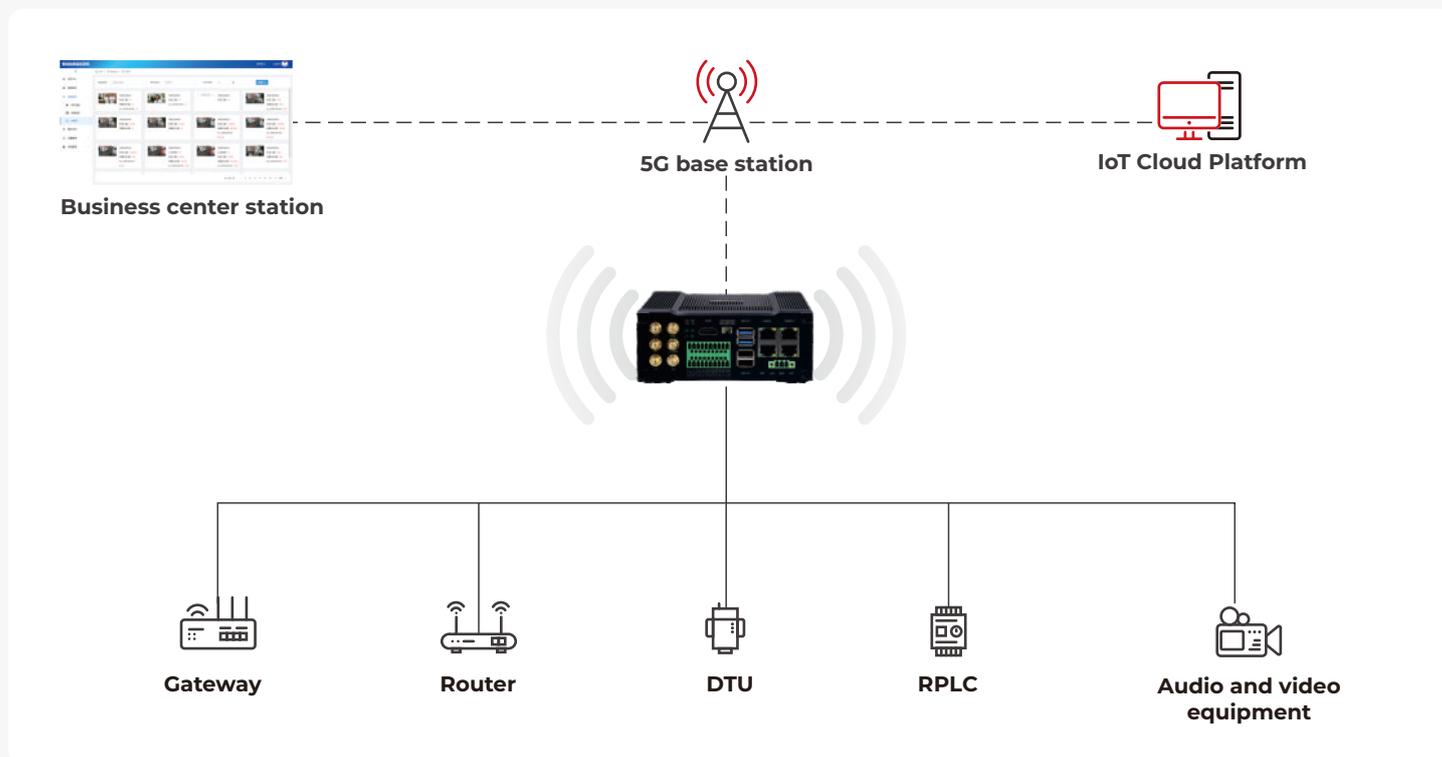**Support RJ45, RS232, RS485, CAN, HDMI and other interfaces**

Support multiple types of AI recognition algorithms and other customized algorithms

Integrate data collection, edge control and analysis, telecommunication, and AI capabilitie

▌Topology diagram

Business center station

5G base station

IoT Cloud Platform

Gateway

Router

DTU

RPLC

Audio and video equipment

Smart power

Smart transportation

Smart construction site

Smart gas

▌Features

AI computing power
Support four major categories of AI algorithms, including dozens of industry AI algorithms such as helmet, work clothes, smoking, flame, smoke, water level, and cross-border, the computing power is as high as 6TOPS.

Edge control
Support combination with other node devices, integrating control, calculation, and analysis to provide a super brain for the site.

Stable operation
Support wired/cellular backup, multi-mode backup, software and hardware dual watchdog, never crash, 5G LAN, network cutting, multi-DNN, and frequency locking.
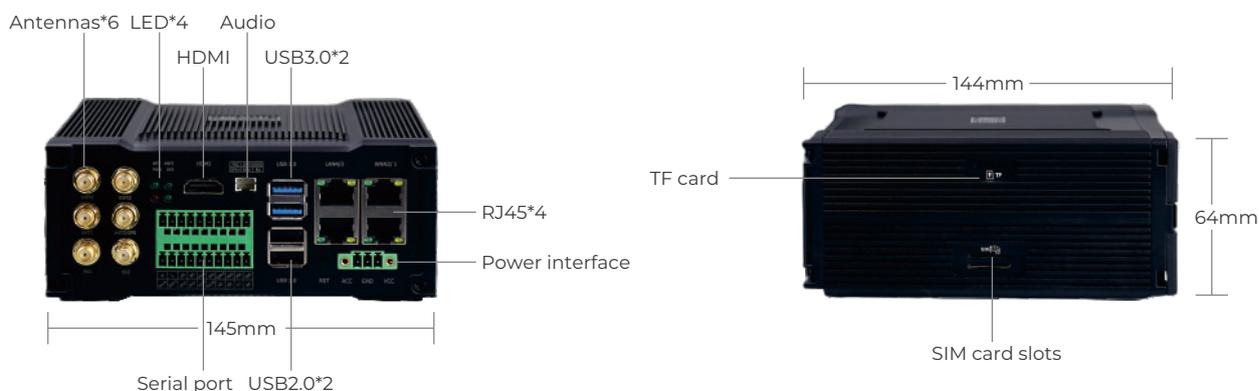
Rich interfaces
Equipped with rich interfaces such as RJ45, RS232, RS485, CAN, HDMI, etc., to transmit data in various ways.

▊ Specification

Hardware			
CPU	Rockchip RK3588		
Memory	8GB/12GB	**Built-in storage**	32GB/64GB

Cellular Interface			
Modem	1×5G NR/NSA/SA or 1×LTE-FDD/TDD		
Number of Antennas	6	**SIM**	2×Mini SIM (2FF)

Peripheral Interface			
Serial	2×RS-232 + 4×RS-485 serial port	**USB**	2×USB3.0, 2×USB2.0
Ethernet	2×LAN 10/100/1000Mbps+2×WAN/LAN 10/100/1000Mbps		
Display	1×HDMI, maximum resolution 2K@30Hz, supports audio		

Software			
Operating System	Hongdian self-developed OSDT system		
AI algorithm	Face recognition, personnel fatigue detection, fall recognition, safety hat recognition, work clothes recognition, smoking recognition, phone-call recognition, flame recognition, smoke recognition, water level detection, etc.		
Video Code	H.265/H.264/VP9, 4K@60fpsHD video decoding		
Image processing	BMP, JPG, PNG, GIF		

Power Supply and Consumption			
Connector	3 pin socket	**Voltage Input**	DC 9~36V, including ACC
Power Consumption	Idle: 333mA@12V DC, Data transceiving: 598mA@12V DC		

Others			
Reset Button	Yes	**Hardware Watchdog**	Yes
LED Indicators	4 indicators for SYS, WiFi, NET, PWR		

Physical Characteristics			
Ingress Protection	IP30	**Housing**	Aluminum+ABS plastic
Dimension	145.0×144.0×64.0(mm)	**Installations**	Wall-mounting
Operating Temperature	-20 ~ +70 °C	**Storage Temperature**	-40 ~ +80 °C
Relative Humidity	0~90%(no condensation)		

▊ Appearance

Packing list

Packing box

Smart3000 AI box

WiFi antenna

NR & LTE antenna

GPS antenna
* Only GPS Version

Ethernet cable

Mounting kits