

INTELLIGENT COMPUTING INDUSTRY APPLICATION SOLUTIONS

SMART CITY

AI Heterogeneous Computing / Image Processing
Biometrics / Cloud-Edge Collaboration



Edge Computing Helps Build Smart Cities

Smart cities use a new generation of information technology to make intelligent responses to various needs, promoting the city to gradually move towards digitization and intelligence.

Yunton smart city solution is based on intelligent computing products. with the help of IoT, AI, intelligent computing, machine vision and other technologies, It realizes the intelligent management and operation of the city, making the city safer, more livable and more sustainable.



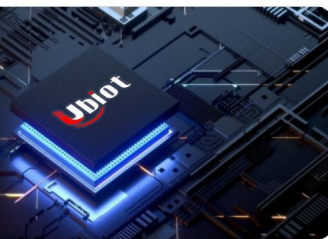
Smart Building and Engineering Construction

Smart buildings and engineering are the cornerstone of smart cities.

Yuntion is committed to providing an overall solution of edge computing intelligent hardware products that fit the scene for smart buildings and engineering construction to realize all-round real-time monitoring of personnel, machinery, materials and environment, promoting the digital and intelligent upgrading of construction projects.

Technical Features

High-performance
Image Processing
3D GPU Rendering



AI Heterogeneous
Computing

Simple &
Fast Algorithm Deployment



4K

Multi-channel 4K HD
Video Codec

4G/WIFI/BT/GPS

Multiple Wireless
Connection Methods



Low Power Consumption
Low Carbon Operation

Solution Highlights



3D Rendering
Digital Twin



Multiple Videos
Access & Display



Various Data
Access Method



Supports Multiple
Biometrics Method

Application

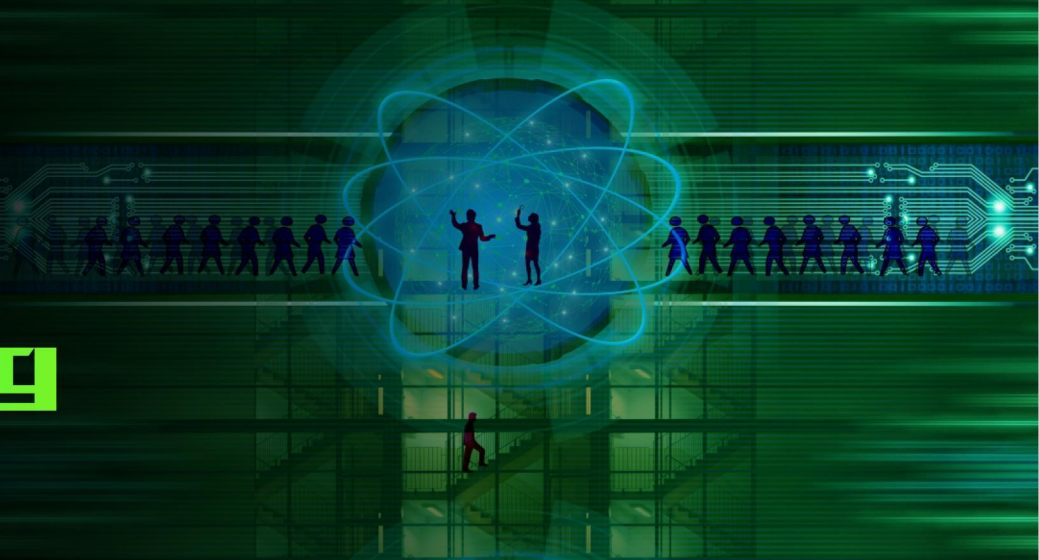
Construction Safety Monitoring

The construction site has diverse personnel, frequent flow, complex environment, and many hidden safety hazards of machinery and equipment, which makes management difficult and costly.

Yuntion takes the intelligent edge station as the core, integrates intelligent algorithms deployed at the edge, collects multi-dimensional sensing data through cameras, sensors and other equipment for real-time analysis, calculation and decision-making, so as to build an intelligent monitoring and prevention system and escort the safety of construction sites.



Smart Building



With the help of Yunti on intelligent computing products and solutions, by accessing and managing multiple types of front-end equipment and sensors, it is possible to collect real-time operating data of people, objects, daily office, security, monitoring, etc.

Yunti on solution helps build cloud-side business collaboration and remote algorithm and application deployment capabilities, and realize digital management of buildings such as smart property, smart traffic, smart parking, smart operation, and smart security.

Technical Features

ISP High Performance
Image Processing

4K
Multi-channel 4K HD
Video Codec

4G/WIFI/BT/GPS
Multiple Wireless
Connection Methods

Support Android
or Linux System

Multiple
Biometric Verification
Methods

AI Heterogeneous
Computing
Simple & Fast
Algorithm Deployment

Solution Highlights



Smart Access
Control
Management



Intelligent
Video Intercom



Intelligent
Elevator
Management



Parking
Management



Property
Service
Management

Application

Intelligent Video Intercom Terminal

The intelligent video intercom terminal is a multi-purpose face recognition all-in-one machine, which can realize the functions of access control and cloud intercom.

Yuntion intelligent video intercom terminal solution is based on SOC chip platform with excellent performance, with 8K 30P H.265 encoding, 15T super AI computing power, hybrid biometric technology and computer vision technology, realizing face recognition, cloud intercom, Remote door opening, visitor management and other functions.

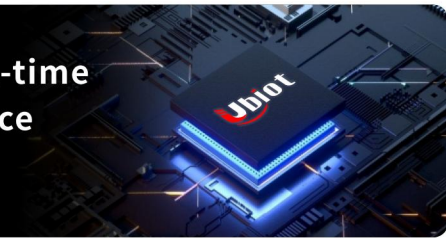


Smart Campus

Relying on technologies such as intelligent computing, machine vision, IoT, and digital twins, the smart campus deeply integrates education, teaching, scientific research, and management with campus resources and application systems to build a safe, stable, healthy, warm and harmonious smart campus.

Technical Features

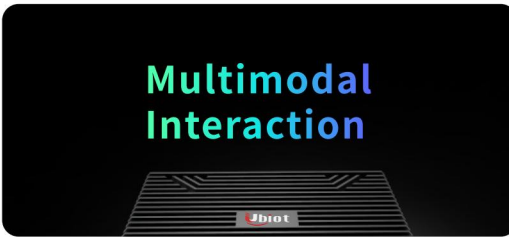
Device-side Real-time
High-performance
GPU Rendering



4K 60fps
HD Image Display



Multimodal
Interaction



AI Heterogeneous
Computing

Simple & Fast Algorithm Deployment



Solution Highlights



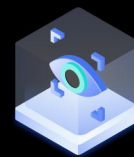
Safety Management



science Teaching



Fair Test



Student Health

Application

AI Sports Motion Detection

AI sports motion detection is based on the Yuntion intelligent edge station. By analyzing the human joint model and motion trajectory, it can detect whether the motion is qualified in real time, and give real-time feedback.

It is a more intelligent, efficient and convenient evaluation and teaching method.



Smart Public Facilities

In the construction of a smart city, public facilities are an indispensable part, which directly reflects the intelligence level of a city.

With Yuntionsmart computing products and solutions to empower relevant public facilities, it can realize perception networking, building a digital and intelligent management platform, promoting data integration and sharing, and improving urban operation management and emergency response capabilities.

Technical Features

Device-side Real-time
High-performance
GPU Rendering

AI Heterogeneous
Computing

Simple &
Fast Algorithm Deployment

Ultra-high
Frame Rate
Image Output

Gbps
Wireless Transfer Rate

Low Power Consumption
Low Carbon Operation

Solution Highlights

Fire & Smoke
Safety Monitoring

Hygiene Behavior
Management

Application

Bright Kitchen

Bright kitchen refers to a form in which catering service providers use transparent glass, video, etc. to show the public the process of catering services.

Yunti on bright kitchen solution uses intelligent computing board as a platform and relies on machine vision and edge computing to realize real-time visualization, intelligent monitoring and management of the entire process of behavioral norms and environmental sanitation involved in the kitchen of catering units.

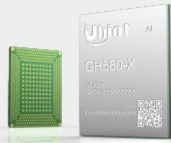


Product Selection

Intelligent Network Module

GH580

CPU: Qualcomm QCS8250
Operating System: Android 10/Ubuntu 18.04
Network: WIFI6, 2.4G&5GHz, BT5.1 LE, M.2 for 5G/4G
Display Interface: 2 x 4-lane MIPI (2560 × 1600) @60HZ Dual screen
4k@60fp over DP/Type-C;



GH360

CPU: Qualcomm SDM660
Operating System: Android 9.0
Network: 4G Cat6/3G/2G WIFI 2.4GHz&5GHz/BT5.0 LE
Display Interface: 2560 × 1600 @60fps primary display
+ 4k @30fps over DP 24 bpp RGB; Dual MIPI DSI



Smart Mainboard

SD5580

CPU: Qualcomm QCS8250
Operating System: Android 10/Ubuntu 18.04
Network: Wi-Fi 6, 2.4G&5GHz, BT5.1 LE M.2 for 5G/4G
Display Interface: 2 x HDMI 4K@60HZ, 1 x HDMI 4K@60HZ,
1 x HDMI 4K@30HZ, 1 x LVDS 1080p, 4 x MIPI CSI



SD5400

CPU: Rockchip Rk3588
Operating System: Android 12/Ubuntu 18.04
Network: Wi-Fi 5, 2.4G&5GHz, BT5.0 LE M.2 for 5G/4G
Display Interface: 2 x HDMI 2.0, 1 x LVDS 1* eDP, 1 x MIPI 4-lane



Intelligent Edge Station

Astro200Pro

CPU: Snapdragon 865 Quad-core A77+Quad-core A55
Computing: 75 TOPS
Operating System: Android/Linux
Wireless: Wi-Fi 6
Video Encoding: H.264/H.265:3840*2160@120fps
or 7640*4230@30fps



Astro200

CPU: Snapdragon 865 Quad-core A77+Quad-core A55
Computing: 15 TOPS;
Operating System: Android/Linux; Wireless: Wi-Fi 6
Video Encoding: H.264/H.265:3840*2160
@120fps or 7640*4230@30fps



Astro200Lite

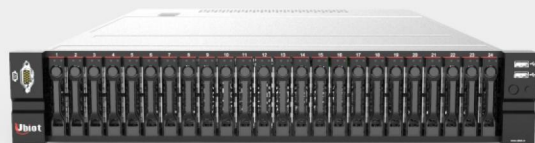
CPU: RK3588 Quad-core A76+Quad-core A55
Computing: 6TOPS
Operating System: Android/Linux
Wireless: Wi-Fi 5
Video Encoding: H.264/H.265:3840*2160@120fps
or 7640*4230@30fps



Intelligent Edge Server

Astro500

CPU: Qualcomm 865
Computing: 1440TOPS
Operating System: Android / Linux
Wireless: Wi-Fi 6
Video Encoding: H.264/H.265:3840*2160@120fps
or 7640*4230@30fps





Yuntion Wireless Technology (Shenzhen) Co., Ltd.

Website: www.yuntion.com

Business Cooperation:

86 189 0246 9335

Email: navy.yao@yuntion.com

Address: Room 1007-1008, Block C, Zhantao Technology Building, Minzhi Street, Longhua District, Shenzhen

Yuntion was established in 2019 and is committed to becoming the world's leading provider of full-scene intelligent computing and machine vision infrastructure solutions. Yuntion is committed to empower applications in all walks of life with intelligent computing and machine vision technology, and build an intelligent world where everything perceives. Ubiquitous connections and perceptions are built.

Prerequisites and Foundations for an Intelligent World; Continuously improving computing power and algorithms make intelligence omnipresent. Through the continuous construction of full-scene infrastructure, consumers can get the ultimate personalized smart experience in home, travel, office, audio-visual entertainment, sports and health and other scenes, bringing people a more convenient, intelligent, comfortable and safe life.