

MegCube

Product specification

MegCube-B3R-1012 N0



Product Features:

Compatible Camera:

- Support RTSP network camera
- Support GA/T1400 captured camera
- Support H.265/H.264, maximum 8MP camera

AI Features:

- Support 64 Face Library, Maximum 300,000 face capacity
 - Multi-Channel/Multi-Algorithms: Face Mode, Mixed Mode (Face Body Binding, Video Structuring)
 - Face Mode: Supports face detection and recognition of 16 channels of video streams, or recognition of 32 channels of face captured cameras
 - Mixed Mode: Support 8 channel face body binding or video structured, and can be mixed by channel
 - Support face capture, face recognition alarm, stranger recognition alarm, etc.
 - Support the recognition of face attributes: gender, age, wearing a hat, wearing glasses, wearing a mask, etc.
 - Supports the capture of faces, human bodies, motor vehicles, non-motor vehicles, license plates, face-to-body binding, and body-non-motor vehicle binding
 - Supports analysis of human attributes such as the color of upper and lower clothes, style of upper and lower clothes, backpack status, and whether to wear a helmet or not
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- Support motor vehicle classification, color, brand, driving direction and non-motor vehicle classification and other vehicle attributes analysis
- Support license plate recognition and license plate-motor vehicle binding relationship

System Features:

- Support working with Pangu, Insight
- Provide GA/T1400 Standard protocol
- Provide REST API for integration

Application Scenarios:

- Provides the capabilities of face recognition and full-target structured analysis. With the upper platform software, it can realize the closed loop of face recognition and video structured scenes
- Used in places where face recognition is required, such as entrances and exits of communities/office buildings, key personnel alarms, stranger alarms, etc
- Applied to structured places where full objects recognition are required, such as human and vehicle management in smart parks, and license plate recognition in smart communities, etc.

Specification :

System	
Main Processor	High performance microprocessor
OS	Embedded Linux
Compatible Camera	
Video Stream	Resolution: 1920 x 1080 (2MP)、2560 x 1440 (4MP)、3840 x 2160 (800MP)
	The relationship between the number of access channels and the resolution: 1) Face mode: maximum support 16 channels @2MP, 8 channels @4MP, 4 channels @8MP 2) Mixed mode: maximum support 8 channels @2MP, also 8 channels @4MP, 4 channels @8MP
Video Format	H.264/H.265
Face Captured Camera	Support up to 32 channels of captured camera (the captured camera needs to support the GA/T1400 protocol)
AI	
Face Mode	Support face capture, face recognition, face attributes

Mixed Mode (According to channel configuration, it can be switched between face and structured algorithms Switch)	Face-Body binding + face recognition: face capture, face recognition, face attributes, human body capture, human attributes, face-body binding
	Video structured 1) Captured Image: face, human body, motor vehicle, non-motor vehicle, license plate 2) Attribute output: face, human body, motor vehicle, non-motor vehicle, license plate 3) License plate recognition 4) Association relationship: face to body binding, vehicle to license plate binding, human to non-motor vehicle binding
Passive Upload	1) Face capture, face recognition, face attribute results 2) Snapshots and attributes of face, body, vehicle and non-motor vehicle, license plate recognition results
Face	Captured Rate $\geq 99\%$
	Captured FP $< 1\%$
	Recognition Accuracy $> 99.5\%$
	Recognition FP: $< 0.5\%$
	Face Capacity 300,000
Human Body	Captured Rate $\geq 95\%$
	Captured FP $< 1\%$
Vehicle	Captured Rate $\geq 90\%$
	Captured FP $< 1\%$
Non-Motor-Vehicle	Captured Rate $\geq 95\%$
	Captured FP $< 1\%$
License Platte	Captured Rate $\geq 95\%$
	Captured FP $< 1\%$
	Recognition Accuracy $\geq 95\%$
Interface	
Network	2, 10M/100M/1000M adaptive Ethernet, RJ45
USB	1, USB3.0
Power	1, 2Pin Green Port
Reset (REC)	1 hole; long press for 10s, from the end of the green light flashing slowly to the fast flashing, the factory settings are restored
Power indicator (PWR)	1, red LED
Running indicator (RUN)	1, green LED
Grounding Pillar	1, at the bottom

System Function	
Face Recognition	Access Control
	Key personnel, Stranger Surveillance and Alarm
Structure	Face/Body/Vehicle/Non-motor-Vehicle capture and attributes, license plate recognition
Network Protocol	TCP/UDP/HTTP/MULTICAST/DHCP/FTP/NTP/HTTPS/RTSP/GAT1400 etc.
Dual Network Port	Support three modes of "multi-address setting", "load balancing", and "master-slave mode"
Log	Query, search and display of captured information of face, human body, vehicle and non-motor-vehicle
Working Environment	
Working Temperature	-20°C ~ +65°C
Storage Temperature	-40°C ~ +80°C
Humidity	40% ~ 90%RH, no condensation
Others	
Power Supply	DC12V ±10%, 2A
Material	Cast aluminum alloy metal chassis
Dimensions	136mm (L) x 98mm (W) x 40mm (H)
Weight	≤0.5Kg

The conversion relationship between video stream and picture stream:

Face mode:

1 video stream X can be equivalent to 2 picture streams Y, satisfying: $2X + Y \leq 32$ (2 MP can be up to 16 channels, 4 MP can be up to 8 channels, and 8 MP can be up to 4 channels)

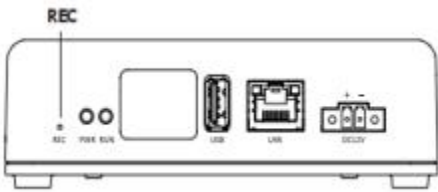
Mixed mode:

1 video stream X can be equivalent to 4 picture streams Y (only supports faces), satisfying: $4X + Y \leq 32$ (2 MP can be up to 8 channels at most, 4 MP can be up to 8 channels at most, 8 MP can be up to at most 4)

Mode	No. of Video Stream	No. of Captured
Face Mode	0 channel 2/4/8 MP	32
	1 channel 2/4/8 MP	30
	2 channel 2/4/8 MP	28
	4 channel 2/4/8 MP	24
	8 channel 2/4 MP	16

	12 channel 2 MP	8
	16 channel 2 MP	0
Mixed Mode	0 channel 2/4/8 MP	32
	1 channel 2/4/8 MP	30
	2 channel 2/4/8 MP	24
	4 channel 2/4 MP	16
	8 channel 2/4 MP	0

Appearance:



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