



Four Million Face Traffic Monitoring Cameras RP2 Product Specification

Update Record

No.	Version	Update	Revise
1	Ver.1.0	Initial	2022.05.18

The document is subject to change without prior notice.

SHENZHEN SYSOLUTION TECHNOLOGY CO., LTD

Functional Features

1. Equipped with a built-in GPU chip, which supports deep learning algorithms and can effectively improve detection accuracy; Support IP67;
2. Support five intelligent resources switching: general behavior analysis, face detection, head count statistics, heat map, and three-dimensional behavioral analysis
3. Facial traffic statistics: support face detection, statistics of the number of people in double intelligent and parallel way. It also can capture the person's face on the video screen at the same time to achieve the number of people statistics;
4. Three-dimensional behavior analysis: through setting the detection area and departure time in the three-dimensional behavior analysis, it supports the detection of personnel leaving status, and when the personnel in the area leave the set area and exceed the set time threshold, it can trigger the alarm, capture the map and send an email; the number of alarms and alarm threshold can be set; it can detect up to 8 detection areas, and each area will be independently detected without interference;
5. General behavior analysis: support for area intrusion, tripwire intrusion, fast movement (support human vehicle classification and accurate detection), objects left behind, objects moved, wandering detection, people gathering, parking detection;
6. Supports a wide range of anomaly detection: motion detection, video masking, scene change, defocus detection, audio anomaly detection, no SD card, insufficient SD card space, SD card error, network disconnection, IP conflict, illegal access;
7. Support five-stream function with three-way HD video display

8. Adopts star-grade low illumination 4 megapixel 1/1.8 inch CMOS image sensor, with good low illumination effect and high image clarity;
9. Maximum output is 4 million (2688 x 1520) @ 25fps;
10. Support H.265 encoding with high compression ratio for ultra-low bit-stream transmission;
11. Equipped with built-in high-efficiency warm light. Its maximum warm light monitoring distance 30m;
12. Support corridor mode, wide dynamic, 3D noise reduction, glare suppression, backlight compensation, digital watermark. It is suitable for different surveillance environments;
13. Support ROI, SMART H.264/H.265, flexible encoding, suit for different bandwidth and storage environments;
14. Support alarm 3 in 2 out, audio 1 in 1 out, 485, BNC, 256G SD card
15. Support AC24V/DC12V/POE power supply mode, support 12V power return, maximum current 165mA, convenient for engineering installation;

Product Images



Product Parameters

Parameter name	Parameter values
Cameras	
Appearance	Gun type
Sensor type	1/1.8-inch CMOS
Pixels	4 MP
Maximum resolution	2688×1520
Scan method	Progressive scanning
Electronic shutter	1/3s~1/100000s (manually or automatically adjustable)
Minimum Illumination	0.001 Lux (in color mode); 0.0001 Lux (in B&W mode); 0 Lux (when fill light is on).
Signal-to-noise ratio	> 56dB
Maximum fill light distance	15m (face detection distance) 40m (video monitoring distance)
Fill light	4 (warm lights)
Footage	
Type of lens	Motorized zoom
Lens interface	φ14
Lens focal length	3.5-12mm
Lens aperture	F1.8
Field angle	Horizontal: 114°~47° Vertical: 62°~26° Diagonal: 136°~54°

Aperture control	Fixed aperture
Close up distance	1.2m
Smart Items	
General behavioral analysis	Objects left behind; removal of objects
Heat maps	Support
Professional Intelligence	
Profound mental	Support
Perimeter precautions	Tripwire intrusion; area intrusion; fast movement (support for human-vehicle classification and accurate detection); wandering detection; people gathering; parking detection
Face capturing	Support
Face detection	Support face detection; tracking; preference; capture; reporting the best face capture; face enhancement; face exposure; face attributes extraction; 6 attributes and 8 expressions, including gender, age, glasses, expression (happy, surprised, normal, angry, sad, disgusted, confused, scared), mask, beard; face keying area can be set: face, single inch photo; real-time capture; preferential capture; quality first three capture strategies; face angle filtering function; preferential duration can be set.
Headcount	Support tripwire headcount, support area headcount, and display and output daily, monthly and yearly statistical reports;

	<p>Support queue management functions and display and output daily, monthly and yearly statistical reports;</p> <p>Supports 4 tripwire headcounts, 4 in-area headcounts and 4 queue management functions.</p>
Stereo behavioral analysis	<p>Though setting the detection area and departure time in the three-dimensional behavioral analysis, it supports the detection of personnel leaving the area. When the personnel in the area leave the set area and exceed the set time threshold, the alarm can be triggered, the map can be captured and an email can be sent; the number of alarms and the alarm threshold can be set; up to 8 detection areas can be set and each area can be detected independently without interfering with each other.</p>
Intelligent Search	<p>With Smart NVR, it can realize secondary intelligent retrieval, analysis and condensed playback of event footage.</p>
Video	
Video compression standards	<p>H.265; H.264; H.264H; H.264B; MJPEG (auxiliary stream support only)</p>
Intelligent Coding	<p>H.264: support; H.265: support</p>
Video frame rate	<p>50Hz Main stream (2688×1520@25fps), secondary stream (704×576@25fps), third stream (1920 × 1080@11fps) Main stream (1920×1080@50fps), secondary stream (704×576@50fps), third stream (640 × 480@50fps) 60Hz Main stream (2688 ×</p>

	1520@30fps), secondary stream (704×480@30fps), third stream (704×480@12fps) Main stream (2688×1520@30fps), Secondary stream (704×480@30fps), Third stream (704×480@12fps) Main stream (1920 × 1080@60fps), Secondary stream (352 × 240@60fps), Third stream (640×480@20fps)
Video bitrate	H.264: 32kbps ~ 8192kbps H.265: 32kbps ~ 8192kbps
Day and night conversion	ICR automatic switching
Backlight compensation	Support
Strong light suppression	Support
Wide Dynamic	120dB
White balance	Automatic; Natural light; Street light; Outdoor; Manual; Zone customization
Gain control	Manual; Automatic
Noise reduction	3D noise reduction
Default code stream at default resolution	4096kbps (2688×1520)
Anti-shake function	Electronic anti-shake
Fogging function	Support
Image Flip	Support
Corridor model	90°: 2688×1520; 2304×1296; 1080P (1920×1080) ; 1.3M (1280×960) ; 720P (1280×720) ; D1 (704× 576/704×480) ; VGA (640×480) ; CIF (352×288/352×240) 270°: 2688×1520; 2304

	×1296; 1080P (1920×1080) ; 1.3M (1280×960) ; 720P (1280×720) ; D1 (704× 576/704×480) ; VGA (640×480) ; CIF (352×288/352×240)
Mirroring	Support
Privacy Shield	4 pieces
Audio	
Audio Interface	Support
Audio compression standards	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G.722.1; G.729; G.723
Audio sampling rate	8KHz/16KHz/32KHz/48KHz/64KHz
Alarm	
Alarm incidents	No SD card; Insufficient SD card space; SD card error; Network disconnection; IP conflict; Illegal access; Motion detection; Video masking; Tripwire intrusion; Area intrusion; Rapid movement; Item left behind; Item moved; Wandering detection; People gathering; Parking detection; Leaving detection; Scene change; Audio anomaly detection; Face detection; Headcount in area; Headcount count; Headcount anomaly detection.
Network	
Network Interface	1 x (RJ-45 network port, supports 10M/100M network data)
Network protocols	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP

Access standards	ONVIF (Profile S/Profile G) ; GB/T28181 ; CGI ; AIPS Cloud Platform 4.0
Preview the maximum number of users	20 (total bandwidth: 88M)
Storage functions	Sysolution Cloud; FTP; Micro SD 卡 (support up to 256G) ; NAS
Browser	Support IE: IE8 or above Support Google: all Support Firefox: all Support Apple: safari 12 or above
Function	
Image settings	Gamma, Saturation, Sharpness, Contrast, Brightness
OSD information overlay	Area overlays; channel headings; time headings; geolocation; font attributes; image overlays; custom overlays; face statistics
Video mode	Manual Recording; Video Detection Recording; Timed Recording; Alarm Recording Recording Recording priority from highest to lowest is Manual Recording > Video Detection Recording > Timed Recording
Max. Micro SD card	256GB
Restore default	Supports one-click restoration of default configuration
User Management	Supports maximum 20 users
Safe Mode	Authorized username and password; MAC address binding; HTTPS encryption; IEEE 802.1x; network access control
Low light level	star-grade
Other functions	Off-duty testing

Working Parameters

Power supply	
Operating voltage	Separate power ports for DC12V ($\pm 30\%$) & AC24V ($\pm 30\%$); POE+ (802.3at)
Power supply method	DC12V/AC24V/POE
Power consumption	Basic power consumption: 2.8W (DC12V); 4.5W (AC24V active power); 4.3W (POE) Maximum power consumption (ICR switching, warm light brightest): 16.5W (DC12V); 21.6W (AC24V active power); 20.5W (POE)
Environment	
Operating temperature	-30°C~+60°C
Working humidity	$\leq 95\%$
Protection class	IP67
Structure	
Housing material	Metal + plastic
Product size	2 221.4mm×108.9mm×100.7mm (L x W x H)
Package size	307mm×155mm×143mm (L x W x H)
Net weight	1068g
Gross weight	1256g
Mounting method	Wall-mounted; suspended; riser-mounted; cross-mounted

Power supply	Not standard
Footage	Standard
Power return	Supports DC12V power return with a maximum current of 165mA

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Dimension

