



# **Four Million Face Traffic Monitoring Cameras RP2 Product Specification**

# Update Record

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No.	Version	Update	Revise
1	Ver.1.0	Initial	2022.05.18

The document is subject to change without prior notice.

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# Functional Features

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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

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# Product Parameters

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

<b>Aperture control</b>	Fixed aperture
<b>Close up distance</b>	1.2m
<b>Smart Items</b>	
<b>General behavioral analysis</b>	Objects left behind; removal of objects
<b>Heat maps</b>	Support
<b>Professional Intelligence</b>	
<b>Profound mental</b>	Support
<b>Perimeter precautions</b>	Tripwire intrusion; area intrusion; fast movement (support for human-vehicle classification and accurate detection); wandering detection; people gathering; parking detection
<b>Face capturing</b>	Support
<b>Face detection</b>	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.
<b>Headcount</b>	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>
<b>Stereo behavioral analysis</b>	<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>
<b>Intelligent Search</b>	<p>With Smart NVR, it can realize secondary intelligent retrieval, analysis and condensed playback of event footage.</p>
<b>Video</b>	
<b>Video compression standards</b>	<p>H.265; H.264; H.264H; H.264B; MJPEG (auxiliary stream support only)</p>
<b>Intelligent Coding</b>	<p>H.264: support; H.265: support</p>
<b>Video frame rate</b>	<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)
<b>Video bitrate</b>	H.264: 32kbps ~ 8192kbps H.265: 32kbps ~ 8192kbps
<b>Day and night conversion</b>	ICR automatic switching
<b>Backlight compensation</b>	Support
<b>Strong light suppression</b>	Support
<b>Wide Dynamic</b>	120dB
<b>White balance</b>	Automatic; Natural light; Street light; Outdoor; Manual; Zone customization
<b>Gain control</b>	Manual; Automatic
<b>Noise reduction</b>	3D noise reduction
<b>Default code stream at default resolution</b>	4096kbps (2688×1520)
<b>Anti-shake function</b>	Electronic anti-shake
<b>Fogging function</b>	Support
<b>Image Flip</b>	Support
<b>Corridor model</b>	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)
<b>Mirroring</b>	Support
<b>Privacy Shield</b>	4 pieces
<b>Audio</b>	
<b>Audio Interface</b>	Support
<b>Audio compression standards</b>	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G.722.1; G.729; G.723
<b>Audio sampling rate</b>	8KHz/16KHz/32KHz/48KHz/64KHz
<b>Alarm</b>	
<b>Alarm incidents</b>	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.
<b>Network</b>	
<b>Network Interface</b>	1 x (RJ-45 network port, supports 10M/100M network data)
<b>Network protocols</b>	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP

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

# Working Parameters

<b>Power supply</b>	
<b>Operating voltage</b>	Separate power ports for DC12V ( $\pm 30\%$ ) & AC24V ( $\pm 30\%$ ); POE+ (802.3at)
<b>Power supply method</b>	DC12V/AC24V/POE
<b>Power consumption</b>	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)
<b>Environment</b>	
<b>Operating temperature</b>	-30°C~+60°C
<b>Working humidity</b>	$\leq 95\%$
<b>Protection class</b>	IP67
<b>Structure</b>	
<b>Housing material</b>	Metal + plastic
<b>Product size</b>	2 221.4mm×108.9mm×100.7mm (L x W x H)
<b>Package size</b>	307mm×155mm×143mm (L x W x H)
<b>Net weight</b>	1068g
<b>Gross weight</b>	1256g
<b>Mounting method</b>	Wall-mounted; suspended; riser-mounted; cross-mounted

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

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# Dimension

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