Rhodium
Professional Video Solution

Diamond Series

NDAA

2MP/5MP/4K AI Motorized Pro Dome Mobile Train Series - IR 50/90M

Features:

- 1/2.8" 2 MP ~ 4K progressive scan Sony STARVIS CMOS
- Lens: Motorized 2.7~13.5mm, /7~22mm@F1.4
- Primary Stream: **90fps@1080P** / 30fps@5MP /30fps@4K
- Min. Illumination, **Color: 0.002Lux**@F1.2 B/W: 0Lux with IR on
- **AI Video Intelligent Analytics**
- SIP/Protocol: Voice & Video-over-IP
- Starlight Technology
- Triple-stream Encoding
- 120dB Super WDR
- IR Distance: 50M / 90M
- Alarm I/O 1/1
- Audio: Built-in Microphone and 1 Audio Output interface
- 3AXIS
- ONVIF Profile G & Q & S & T, API
- Support micro SD up to 256GB
- POE, 12VDC, IP67, IK10, -40°C ~ + 70°C

AI Video Analytics

- 8 intelligent VCA modes powered by AI engine, which can intelligently filter objects to focus on human and vehicle detection.
- People Counting technology provides high accuracy and real-time data based on AI algorithm with statistic reports.
- Face Detection function detects human faces in the monitoring scene and captures the snapshots, which greatly enhances the monitoring efficiency.

0.002 Lux Ultra Low-light

The starlight camera is able to deliver high detailed color images even in low light environment reaching 0.001Lux(Color) or 0Lux(B/W), and near infrared light environments without any supplementary lighting.

3 in 1 Super WDR Pro - 120 dB

Rhodium upgraded 3 in 1 Super WDR Pro outputs three frames each line, which is able to bring more details especially moving subjects. What's more, it greatly improves image quality for reducing smear and noisy points. The ratio that the brightest light signal values divided by the darkest light signal values is up to 140dB.

Clamshell Design

Aiming to reduce the installation troubles to the least, Rhodium creatively introduces the clamshell design to the dome base. This revolutionary innovation enlarges the space to make cable connection a piece of cake, greatly saving efforts for installers.

	Model	RDO2872-R(T)F(I)PA-TM (2MP)	RDO2972-R(T)F(I)PA-TM (2MP)	RDO5372-FPA-TM (5MP)
Camera	Image Sensor	1/2" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS	
	Min. Illumination	Color: 0.002Lux@F1.4 B/W: 0Lux with IR on	Color: 0.005Lux@F1.4 B/W: 0Lux with IR on	Color: 0.008Lux@F1.4 B/W: 0Lux with IR on
	WDR	120dB Super WDR **(Super WDR Pro is optional for T Series)**		120dB Super WDR
	Shutter Time	1/100000s~1s		
	IR Distance	Up to 50m	Up to 50m(3.0~10.5mm/2.7~13.5mm) Up to 90m(7~22mm)	
	Day/Night Mode	Day/Night/Auto/Customize/Schedule		
	S/N	>55dB		
Lens	Lens	Motorized 3.6~10mm@F1.4 P-Iris(Optional)	Motorized 2.7~13.5mm/3.0~10.5mm/7~22mm@F1.4 P-Iris(Optional)	
	Field of View	H104°~H43°/D120°~D50°/V59°~V24°	H115°~H34°/D135°~D39° /V62°~V19° (2.7~13.5mm) H102°~H34°/D118°~D38° /V56°~V19° (3.0~10.5m) H44°~H17°/D51°~D19° /V24°~V9° (7~22mm)	H100°~H32°/D125°~D40° /V74°~V24° (2.7~13.5mm) H90°~H31°/ D114°~D38° / V67°~V23°(3.0~10.5mm) H37°~H15°/D47°~D19° /V28°~V11° (7~22mm)
	Mount	Φ14		
	Focus Control	Auto/Manual		
	Iris Control (Optional for I Series)	Auto/Manual		
Video	Max. Image Resolution	1920x1080		2592x1944
	Primary Stream	60fps@(1920x1080, 1280x960, 1280x720, 704x576)		30fps@(2592x1944), 45fps@(2048x1536), 60fps@(1920x1080, 1280x960, 1280x720, 704x576)
	Secondary Stream	30fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180)		
	Tertiary Stream	30fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240, 320x192, 320x180)		
	Video Compression	H.265⁺/H.265(HEVC)/H.264⁺/H.264/MJPEG		
	Video Bit Rate	16Kbps~16Mbps(CBR/VBR Adjustable)		
	Privacy Masking	Up to 8 areas		
	ROI	Up to 8 areas		
	Image Setting	Brightness/Contrast/Saturation/Sharpness		
Interface	Ethernet	1*RJ45 10M/100M Ethernet Port		
	Audio I/O	Built-in Microphone and 1 Audio Output interface		
	Alarm I/O	1/1		

Network	Network Storage	NAS(Support NFS, SMB/CIFS), ANR		
	Protocol	IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP, NTP, SMTP, SNMP, UPnP, Bonjour, SIP, PPPoE, VLAN, 802.1x, QoS, IGMP, ICMP, SSL		
Audio	Audio Compression	G.711/AAC/G.722/G.726		
	Audio Sampling Rate	8/16/32/44.1/48KHz		
	Audio Bit Rate	16~256kbps		
	Two-way Audio	Support		
Intelligent Analytics	Video Analysis	Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Object Left, Object Removed		
	Face detection	Detect and capture faces, get real-time snapshots		
	People Counting&Report	Count the number of people entering or exiting, Up to 4 detection areas for regional people counting		
System	Storage	Support microSD/SDHC/SDXC Card Local Storage, up to 256G		
	Advanced Function	BLC, HLC, 2D DNR, 3D DNR, Defog, AWB, EIS, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark, MultiCast, UniCast		
	SIP/VoIP Support	Yes, Voice & Video-over-IP		
	Event Trigger	Motion Detection, Network Disconnection, Audio Alarm, External Input, etc.		
	Event Action	FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, HTTP Notification, etc.		
	System Compatibility	ONVIF Profile G & Q & S & T, API		
General	Working Temperature	-40℃~70℃		
	Working Humidity	0~90%(Non-condensing)		
	Power Supply	PoE (802.3af) / DC 12V±10%		
	Power Consumption	9W MAX 11W MAX (With IR on	8W MAX 11W MAX (With IR on)	9W MAX 11W MAX (With IR on
	Housing	Vandal-proof IK10-rated Metal Housing / Up to IP67-rated for Weather-resistant Performance		
	Weight	1100g		
	Dimensions	Φ143mmX108.4mm		
	Warranty	3/5 Years		
Certifications:		CE, FCC, LVD, ISO9001, ISO14001 EN55032:2015, EN55035:2017, EN61000-3-2:2014, EN61000-3-3:2013, EN62368-1:2014+A11:2017		
Mobile Train Certifications:		Weather rating IP66 (IEC60529), EN 50121-4, Lightning certification EN62305, Vibration - ENV EN60068, Safety: EN12675, LVD: 2014/35 / EU, EMC: 2014/30/EU (IEC61000 is included in EMC:2014/30/EU), Vandal resistant IK10 (IEC-62262)		

	Model	RDO8172-FPA-TM (4K)	RDO8272-F(I)PA-TM (4K)
Camera	Image Sensor	1/2.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS
	Min. Illumination	Color: 0.012Lux@F1.4 B/W: 0Lux with IR on	Color: 0.009Lux@F1.4 B/W: 0Lux with IR on
	WDR	120dB Super WDR	
	Shutter Time	1/100000s~1s	
	IR Distance	Up to 50m	
	Day/Night Mode	Day/Night/Auto/Customize/Schedule	
	S/N	>55dB	
Lens	Lens	Motorized 2.7~13.5mm@F1.4 P-Iris(Optional)	Motorized 3.6~10mm@F1.4 P-Iris(Optional)
	Field of View	H96°~H33°/D112°~D37°/V53°~V18°	H110°~H46°/D126°~D54°/V61°~V25°
	Mount	Φ14	
	Focus Control	Auto/Manual	
	Iris Control (Optional for I Series)	Auto/Manual	
Video	Max. Image Resolution	3840x2160	
	Primary Stream	30fps@(3840x2160, 3072x2048, 2592x1944, 2592x1520, 2048x1536, 1920x1080, 1280x960, 1280x720, 704x576)	
	Secondary Stream	30fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180)	
	Tertiary Stream	30fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240, 320x192, 320x180)	
	Video Compression	H.265+/H.265(HEVC)/H.264+/H.264/MJPEG	
	Video Bit Rate	16Kbps~16Mbps(CBR/VBR Adjustable)	
	Privacy Masking	Up to 8 areas	
	ROI	Up to 8 areas	
	Image Setting	Brightness/Contrast/Saturation/Sharpness	
Interface	Ethernet	1*RJ45 10M/100M Ethernet Port	
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	Alarm I/O	1/1	
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	Advanced Function	BLC, HLC, 2D DNR, 3D DNR, Defog, AWB, EIS, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark, MultiCast, UniCast	
	SIP/VoIP Support	Yes, Voice & Video-over-IP	
	Event Trigger	Motion Detection, Network Disconnection, Audio Alarm, External Input, etc.	
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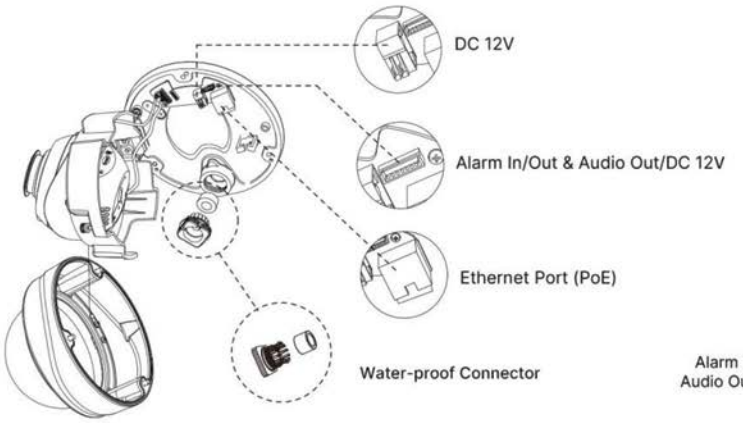
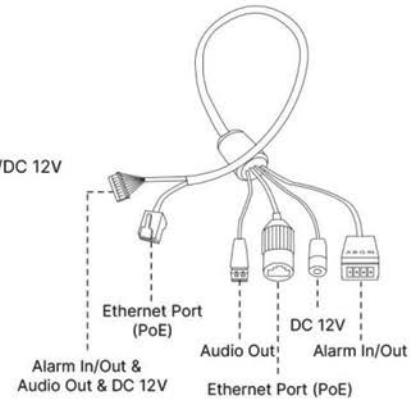
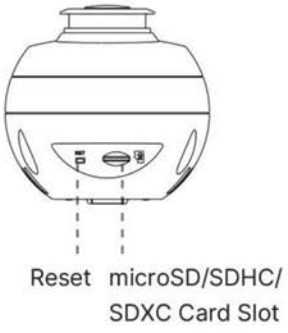
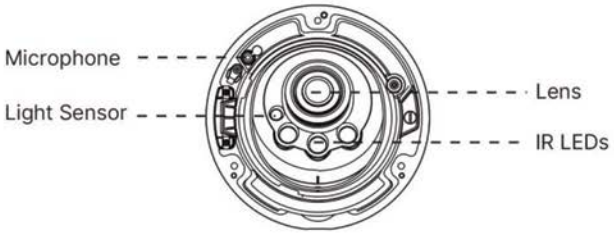
	System Compatibility	ONVIF Profile G & Q & S & T, API	
General	Working Temperature	-40℃~70℃	
	Working Humidity	0~90%(Non-condensing)	
	Power Supply	PoE (802.3af) / DC 12V±10%	
	Power Consumption	10W MAX 12W MAX (With IR on)	10W MAX 13W MAX (With IR on)
	Housing	Vandal-proof IK10-rated Metal Housing / Up to IP67-rated for Weather-resistant Performance	
	Weight	1100g	
	Dimensions	Φ143mmX108.4mm	
	Warranty	3/5 Years	
Certifications:		CE, FCC, LVD, ISO9001, ISO14001 EN55032:2015, EN55035:2017, EN61000-3-2:2014, EN61000-3-3:2013, EN62368-1:2014+A11:2017	
Train Certifications:		Weather rating IP66 (IEC60529), EN 50121-4, Lightning certification EN62305, Vibration - ENV EN60068, Safety: EN12675, LVD: 2014/35 / EU, EMC: 2014/30/EU (IEC61000 is included in EMC:2014/30/EU), Vandal resistant IK10 (IEC-62262)	

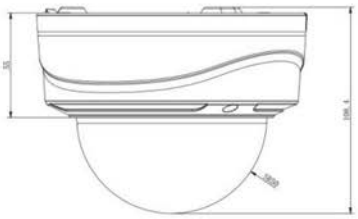
Structure Diagrams

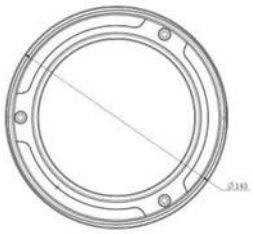












Units: mm

Accessories Support

RA01 Pole Mount

Weight: 720g
Dimensions: 170*51.5*152.6mm

RA03 External Corner Bracket

Weight: 900g
Dimensions: 170*152.5*76.3mm

RA72 Wall Mount

Weight: 560g
Dimensions: 240*160*136mm

RAC-72 Smoked Dome Cover

For concealing where a camera is pointed

RA75 Junction Box

Weight: 200g
Dimensions: 145*167*33.5mm

RA76 Pendant Mount

Weight: 620g
Dimensions: 136*L (L is default as 300mm, also can be extended with A76-L)

RA76-L Extension Lever

Weight: 315g
Dimensions: 34*300mm