

RYD Security Company Ltd

China Headquarters

Address: No.05, 5F, B90, Zhangkeng Second Zone, Baoan District, Shenzhen, China 518000, Tel: 86 755 2685 7580

USA Technical Partner

Address: 350 W 9th Avenue, Suite 106 Escondido, CA, 92025 USA, Tel: 1 858 748 1600 ext. 333/334

Effio-P Series Outdoor Analog Cameras

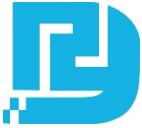
1/3-inch, CCD, 700TVL, WDR, DSS, AGC, AWB, 3D DNR, BLC, OSD, Day/Night, Water-Resistance, Bullet Case

Product Features

- 700 TV Lines: High Sensitivity (0 Lux with IR on)
- 120dB Wide Dynamic Range (**WDR**)
- Optical Day/Night Function to Switch to Day or Night Mode depending on the light level
- Sony 1/3-inch Exview HDD CCD II 960H
- Sony Digital Signal Processor (**DSP**), Effio-P
- IR Compensation
- Power (12 DC)
- Digital Slow Shutter (**DSS**)
- Digital Zoom
- 3D Digital Noise Reduction (**3D DNR**)
- IR Illumination, distance depends on model, refer chart below
- Adjust **OSD** menu by controller via BNC cable
- Environmental Capability with a standard Operating Temperature
- Privacy Zones
- Motion Detection
- Alarm Output

Product Specifications

Model	RYD-AO-EP	RYD-AM-EP	RYD-AX-EP	RYD-AV-EP
Image				
Lens	3.6/6/8mm option	4/6/8/12mm option	3.6/6mm option	4/6/8/12/16mm option
Angle of View	3.6mm/F1.2(wide)	4mm/F1.2(wide)	3.6mm/F1.2(wide)	4mm/F1.2(wide)
Horizontal	67.4°	62°	67.4°	62°
Vertical	50.6°	46.5°	50.6°	46.5°
IR Working Distance	30m (98ft)	60m (197ft)	40m (131ft)	60m (197ft)
Low-Light Technology	2 mini Array LEDs	2pcs Super Power IR Array LEDs	3pcs mini Array LEDs	2pcs Super Power IR Array LEDs
Power Consumption	3W(IR off)/3.5W(IR on)	6.5W(IR off)/7W(IR on)	4.5W(IR off)/5.0W(IR on)	6.5W(IR off)/7W(IR on)
Water Resistance	IP66	IP66	IP66	IP66
Product Size	6.8in(L)*2.8in(W)*2.7in(H)	12.9in(L)*4.4in(W)*3.8in(H)	8.1in(L)*3.5in(W)*3.4in(H)	9.8in(L)*7.7in(W)*4.7in(H)
Product Weight	0.77lb	2.0lb	0.91lb	1.1lb
Color Option	Gray, White	White, Dark Blue	Dark Blue, White	Dark Blue, White



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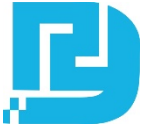
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Model	RYD-A857-2-EP	RYD-A861-2-EP	RYD-A871-EP	RYD-AKT-EP
Image				
Lens	3.6/4/6/8/12mm option	4/6/8/12/16mm option	4/6/8/12/16/25mm option	3.6mm/F2.0
Angle of View	3.6mm/F1.2(wide)	4mm/F1.2(wide)	4mm/F1.2(wide)	3.6mm(wide)
Horizontal	67.4°	62°	62°	67.4°
Vertical	50.6°	46.5°	46.5°	50.6°
IR Working Distance	50m (164ft)	60m (197ft)	70m (229ft)	20m (65ft)
Low-Light Technology	2 Array III LEDs	4 Array III LEDs	4 Array III LEDs	24 Standard LEDs
Power Consumption	4W(IR off)/4.8W(IR on)	8W(IR off)/8.8W(IR on)	8W(IR off)/8.8W(IR on)	2.5W(IR off)/3.3W(IR on)
Water Resistance	IP66	IP66	IP67	IP66
Product Size	5.8in(L)*3.9in(W)*2.9in(H)	8.7n(L)*5.2n(W)*3.5n(H)	7.3n(L)*3.9n(W)*2.8n(H)	5.5in(L)*4.5in(W)*3.0in(H)
Product Weight	1.4lb	1.92lb	1.3lb	0.99lb
Color Option	white	white	white	white
Model	RYD-AFD-EP	RYD-ACC-EP	RYD-AAS-EP	RYD-ACG-EP
Image				
Varifocal Lens	2.8-12mm	2.8-12mm	2.8-12mm	2.8-12mm
Angle of View	2.8mm(wide)-12mm(telephoto)	2.8mm(wide)-12mm(telephoto)	2.8mm(wide)-12mm(telephoto)	2.8mm(wide)-12mm(telephoto)
Horizontal	86.3° 22.1°	86.3° 22.1°	86.3° 22.1°	86.3° 22.1°
Vertical	64.7° 16.6°	64.7° 16.6°	64.7° 16.6°	64.7° 16.6°
IR Working Distance	60m (197ft)	60m (197ft)	40m (131ft)	30m (98ft)
Low-Light Technology	72 Standard LEDs	72 Standard LEDs	42 Standard LEDs	36 Standard LEDs
Power Consumption	8W(IR off)/8.8W(IR on)	8W(IR off)/8.8W(IR on)	3.5W(IR off)/4.2W(IR on)	3W(IR off)/3.8W(IR on)
Water Resistance	IP66	IP66	IP66	IP66
Product Size	10.8in(L)*4.9in(W)*4.1in(H)	10.8in(L)*4.9in(W)*4.1in(H)	7.9in(L)*6.7in(W)*3.3in(H)	7.9in(L)*3.2in(W)*2.9in(H)
Product Weight	3.7lb	3.7lb	3.1lb	2.2lb
Color Option	black	gray, white	black	gray



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Product Details

The RYD **Outdoor Effio-P Series** is a premium grade, wide range integrated, IR, bullet, CCD camera. It uses a group of integrated infrared LEDs to deliver high quality pictures, even at night with zero illumination. Its WDR and day/night technology provides outstanding performance over a wide range of low-light conditions, as well as extreme high backlight conditions. The camera uses a removable infrared (**IR**) cut filter to switch between color and black-white modes as environmental lighting conditions change, and when the need for infrared sensitivity is realized

The RYD **Outdoor Effio-P Series** is a high resolution digital camera with 700 TVL of resolution, and a minimum of 0.1 lux illumination in color mode. In low-light conditions, the camera can use Digital Slow Shutter (**DSS**) to produce 0.03 lux sensitivity.

The RYD **Outdoor Effio-P Series** is equipped with high performance IR compensation. The camera can be set manually to adjust IR illumination levels, enabling customers to change the levels of luminance and contrast according to the shooting environment. This function reduces the blooming effect and delivers clear images when objects get closer to the camera. With IR supplemental lighting, the RYD **Outdoor Effio-P Series** operates under zero lux (monochrome mode). Camera features include autosensing power (12 VDC with internal synchronization) and automatic gain control (**AGC**)

The RYD **Outdoor Effio-P Series** is equipped with high performance adaptive illumination IR LEDs. Supported by built-in **WDR** technology, the

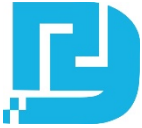
camera can detect the IR illumination level and adjust it automatically. This again reduces the blooming effect and outputs clear images when an object gets increasingly closer to the camera

The RYD **Outdoor Effio-P Series** includes Automatic White Balance (**AWB**) for difficult lighting situations, Digital Noise Reduction (**DNR**) that minimizes environment noise levels to produce clear image quality, and Backlight Compensation (**BLC**) that adjusts the picture to prevent objects from appearing dark due to a strong backlight. These fine-tuning features are easily configured using the convenient multi languages On-Screen Display (**OSD**) menu. Use this menu to select a specific profile, to customize and save camera settings for the specific application, and trigger alarm output functions

The RYD **Outdoor Effio-P Series** has an wide range operating temperature (-20° to 50°C)

The RYD **Outdoor Effio-P Series** has built in analytical capabilities including privacy zones, motion detection, that adds to its functionality and makes it suitable for most applications

Typical applications for the RYD **Outdoor Effio-P Series** includes longer-range Outdoor boundary surveillance that has zero light at night, and a need to supplement the scene with IR light. The true day/night functionality provides the best images in low-light and IR light applications, by using a black-white mode function



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Technical Specifications

CAMERA/OPTICS

Imaging Sensor:	Sony 1/3-inch Exview HAD CCD II 960H
Signal Processing:	Sony DSP, Effio-P
Day/Night Operation:	
Day:	Infrared (IR) cut filter
Night	Same optical displacement as day
Effective Pixels	
NTSC:	976(H)*484(V), approx. 470k
PAL:	976(H)*582(V), approx. 570k
Horizontal Resolution:	700TVL
Minimum Illumination	
Color (without IR)	0.03 lux
Mono (with IR on)	0 lux
IR Cut Filter	Yes, D/N switch
Dynamic Range	120 dB dual-scan WDR
IR Illumination Distance	Refer Product Specifications
Low-Light Technology	Refer Product Specifications
Electronic Shutter Range	
NTSC	1/60 to 1/100,000 sec
PAL	1/50 to 1/100,000 sec
Slow shutter support	Yes
Video Output	.0 Vp-p, NTSC/PAL composite, 75 ohms
	BNC connector
Auto White Balance Range	2,000° to 9,500°K
White Balance	
	ATW/MANUAL/PUSH/USER1/USER2
Signal-to-Noise Ratio	48 dB
Automatic Gain Control	Yes
Lens	Refer Product Specifications
Backlight Compensation	Yes
F-Number	F/1.2
Focal Length	Refer Product Specifications
Angle of View	Refer Product Specifications
Horizontal	Refer Product Specifications
Vertical	Refer Product Specifications
Adjusting Angle	
Panning Range	NOT available
Tilting Range	NOT available
Rotation Range	NOT available

Digital Noise Reduction	3D
Privacy Zones	Yes; 8 sizable windows
Motion Detection	Yes; 4 areas, sensitivity selectable
Digital Zoom	1~8x
Image Stabilization	Yes
Scene Learning/Analytics	Yes
Remote Access	BNC cable with controller
Alarm Output	1

ELECTRICAL

Power Requirement	12 VDC +10% to -15%
Power Consumption	Refer Product Specifications
Power Connector	2-pin terminal block with screw terminals
Video Connector	BNC
Alarm Output	2-pin terminal block with screw terminals

ENVIRONMENTAL

Operating Temperature	- 20° to 50°C (14° to 122°F)
Storage Temperature	- 10° to 60°C (-4° to 140°F)
Operating Humidity	30% to 85%, noncondensing
Storage Humidity	30% to 85%, noncondensing
Impact Resistance	Refer Product Specifications
Waterproof Rating	Refer Product Specifications

PHYSICAL

Construction	Aluminum
Unit Weight	Refer Product Specifications
Shipping Weight	Refer Product Specifications

RECOMMENDED ACCESSORIES

Wall Bracket, Ceiling Bracket (optional)

RECOMMENDED POWER SUPPLIES

Power Supply per Camera, 12 VDC, 1A

OSD Menu optional (Updated without Notice)