

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 Indoor Analog Camera

1/3-inch, CCD, 700TVL, WDR, DSS, AGC, AWB, 3D DNR, BLC, OSD, Day/Night, Dome 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 SONY 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-AQ-EP	RYD-AH-EP	RYD-AF-EP	RYD-AK-EP
Image				
Lens	3.6/6mm option	3.6/6mm option	2.8-12mm only	2.8-12mm only
Angle of View	3.6mm/F1.2.	3.6mm/F1.2.	8mm (wide)-12mm (telephoto)	2.8mm (wide)-12mm (telephoto)
Horizontal	67.4°	67.4°	86.3° 22.1°	86.3° 22.1°
Vertical	55.6°	55.6°	64.7° 16.6°	64.7° 16.6°
IR Working Distance	Not Available	30m (98ft)	40m(131ft)	25m (65.6ft)
Low-Light Technology	Not Available	2pcs mini IR array LED	3pcs mini IR array LED	21 Standard LEDs
Power Consumption	0.9W	3.0W(IR off)/3.5W(IR on)	4.5W(IR off)/5.0W(IR on)	2W(IR off)/2.5W(IR on)
Product Size				
Product Weight	0.37lb	0.37lb	1.22lb	0.61lb
Construction	ABS Plastic	Metal	Metal	ABS Plastic
Color Option	White	White	White	Apricot



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Model	RYD-A731-EP	RYD-A730-EP	RYD-A630-EP	RYD-AGP-EP
Image				
Lens	2.8/3.6/6/8mm	2.8/3.6/6/8mm	4/6/8/12mm	3.6mm only
Angle of View	2.8mm/F1.2.	2.8mm/F1.2	4mm/F1.2	3.6mm/F1.2
Horizontal	86.3°	86.3°	62°	67.4°
Vertical	64.7°	64.7°	46.5°	55.6°
IR Working Distance	30m (98ft)	30m (98ft)	50m(164ft)	20m (65.6ft)
Low-Light Technology	18 Standard LEDs	12 RS online LEDs	1 Array III LED	24 Standard LEDs
Power Consumption	2.5W(IR off)/3.3W(IR on)	2.5W(IR off)/3.3W(IR on)	2.5W(IR off)/3.3W(IR on)	2W(IR off)/2.8W(IR on)
Product Size	6.25in(L)*6.25in(W)*3.2in(H)	6.25in(L)*6.25in(W)*3.2in(H)	5in(L)*5in(W)*3.5in(H)	3.7in(L)*3.7in(W)*2.7in(H)
Product Weight	0.48lb	0.48lb	0.77lb	0.33lb
Shipping weight				
Construction	ABS Plastic	ABS Plastic	ABS Plastic	ABS Plastic
Color Option	White	White	White	Apricot

Product Details

The RYD **Indoor Effio-P Series** is a premium grade, wide range integrated, IR, dome, 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 **Indoor 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 **Indoor 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



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lighting, the RYD **Indoor 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 **Indoor Effio-P Series** is equipped with high performance adaptive illumination IR LEDs. Supported by built-in WDR technology, camera can detect the IR illumination level and adjusts it automatically. This again reduces the blooming effect and outputs clear images when an object gets increasingly closer to the camera

The RYD **Indoor 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 **Indoor Effio-P Series** has an wide range operating temperature (-20° to 60°C)

The RYD **Indoor 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 **Indoor Effio-P Series** includes shorter-range indoor 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

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

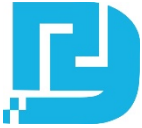
White Balance: ATW/MANUAL/PUSH/USER1/USER2

Signal-to-Noise Ratio: 48 dB

Automatic Gain Control: Yes

Lens: Refer Product Specifications

Backlight Compensation: Yes



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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	Refer Product Specifications
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)