

### 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-G Series Outdoor Analog Camera

1/3-inch, 1.3M CMOS Sensor, 900TVL, DWDR, DES, AGC, AWB, 3D DNR, BLC, OSD, Day/Night, Water-Resistance, Bullet Case

### **Product Features**

- 900 TV Lines: High Sensitivity (0 Lux with IR on)
- 48dB Digital Wide Dynamic Range (DWDR)
- Optical Day/Night Function to Switch to Day or Night Mode depending on the light level
- Sony 1/3-inch CMOS Sensor 960H
- Sony Digital Signal Processor (DSP), Effio-G
- IR Compensation:
- Power (12 DC)
- Digital Electronic Shutter (DES)
- 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-EG	RYD-AM-EG	RYD-AX-EG	RYD-AV-EG
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. lin(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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Model	RYD-A857-2-EG	RYD-A861-2-EG	RYD-A871-EG	RYD-AKT-EG
Image	909			
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-EG	RYD-ACC-EG	RYD-AAS-EG	RYD-ACG-EG
Image		OF		
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	3.71b	3.71b	3.11b	2. 21b
Color Option	black	gray, white	black	gray



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### **Product Details**

The RYD **Outdoor Effio-G Series** is a premium grade, wide range integrated, IR, bullet camera. It uses a group of integrated infrared LEDs to deliver high quality pictures, even at night with zero illumination. Its DWDR 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-G Series** is a high resolution digital camera with 900 TVL of resolution and a minimum of 0.001 lux illumination in color mode. In low-light conditions, the camera can use Digital Electronic Shutter (**DSS**) to produce 0.03 lux sensitivity.

The RYD **Outdoor Effio-G 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-G 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-G Series** is equipped with high performance adaptive illumination IR LEDs. Supported by built-in digital **WDR** technology, cameras 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-G 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-G Series** has an wide range operating temperature (-20° to 50°C)

The RYD **Outdoor Effio-G 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-G Series** includes wide 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 CMOS Sensor 960H

Signal Processing: Sony DSP, Effio-G

Day/Night Operation:

Day: Infrared (IR) cut filter

Night Same optical displacement as day

**Effective Pixels** 

NTSC&PAL: 1200(H)\*960(V), approx. 1300k

Horizontal Resolution: 900TVL

Minimum Illumination

Color (without IR) 0.001 lux

Mono (with IR on) 0 lux

IR Cut Filter Yes, D/N switch

Dynamic Range 48 dB digital WDR

IR Illumination Distance Refer Product Specifications

Low-Light Technology Refer Product Specifications

**Electronic Shutter Range** 

**NTSC** 1/60 to 1/100,000 sec

1/50 to 1/100,000 sec PAI

Slow shutter support

Video Output .0 Vp-p, NTSC/PAL composite, 75 ohms

**BNC** connector

Yes

3D

Auto White Balance Range 2,000° to 9,500°K

White Balance

**Backlight Compensation** 

ATW/MANUAL/PUSH/USER1/USER2

Signal-to-Noise Ratio 48 dB

Automatic Gain Control Yes

Lens Refer Product Specifications

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

NOT available Tilting Range

Rotation Range NOT available

Digital Noise Reduction

Privacy Zones Yes; 8 sizable windows

Motion Detection Yes; 4 areas, sensitivity selectable

Digital Zoom 1~6x

Image Stabilization Yes

Scene Learning/Analytics Yes

BNC cable with controller Remote Access

Alarm Output

**ELECTRICAL** 

Power Requirement 12 VDC +10% to -15%

**Power Consumption Refer Product Specifications** 

**Power Connector** 2-pin terminal block with screw terminals

Video Connector

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)