HDEG-B50F-IR-M1
5MP Starlight HD-AVS Bullet Camera

IC REALTIME

- 25 fps@5MP (16:9 video output)
- AVS/CVBS/AHD/TVI multi format output
- Starlight, 120 dB true WDR, 3DNR
- 3.6mm fixed lens, Built-in Mic
- Smart IR, Max. IR length 131 feet
- IP67, DC12V±30%

System Overview

IC Realtime's HDEG-B50F-IR-M1 bullet camera features 5MP resolution with 16:9 aspect ratio. The camera is equipped with 2.8mm fixed lens paired with 120dB true WDR and Starlight support. This enables excellent image quality under the most demanding lighting conditions. The onboard Smart IR features a max IR length of 131 feet providing excellent night vision capabilities.

This HD-AVS camera offers exceptional HD video surveillance with the simplicity of reusing existing coaxial infrastructure. The camera also supports multiple coax formats such as CVI/ CVBS/ AHD and TVI , as well as a built in microphone for audio support and IP67 weather protection.

System Overview

Multiple-formats
The camera supports multiple video formats including HD-AVS, CVBS, TVI and AHD. A DIP switch located on the cable allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only AVRs, but also most existing HD/SD DVRs.

Smart IR Technology
With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 131.2 ft (40 m)

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Simplicity
HD-AVS technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HD-AVS system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

Starlight
With the adoption of large sized high performance sensor, the camera is able to provide incomparable performance even under extreme low light environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

Wide Dynamic Range
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Protection
The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 rating, making it suitable for indoor or outdoor environments.
Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Advanced 3DNR
3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. IC Realtime's advanced 3DNR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting conditions. 3DNR also effectively decreases the required bandwidth and helps lower storage space requirements.

Technical Specification

Camera

Image Sensor	1/2.7" CMOS
Effective Pixels	2880 × 1620 (5MP)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100,000 s NTSC: 1/4 s–1/100,000 s
Minimum Illumination`	0.001 Lux/F1.6; 30IRE; 0 Lux IR on
S/N Ratio	More than 65dB
IR Distance	131.2 ft (40 m)
IR On/Off Control	Auto / Manual
IR Illuminators	2

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8mm
Max. Aperture	F1.6
Angle of View	H 132° × V 111°
Focus Control	Fixed
Close Focus Distance	3.0 ft (0.9 m)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	208.7 ft	83.3 ft	41.7 ft	21 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Video

Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/ 960 × 480)
Frame Rate	AVS:NTSC: 5M@25 fps; 4M@30 fps; 1080p@30 fps PAL: 5M@25 fps; 4M@25 fps; 1080p@25 fps
	AHD: NTSC: 4M@30 fps PAL: 4M@25 fps
	TVI: NTSC: 4M@30 fps PAL: 4M@25 fps
Day/Night	Auto switch by ICR
WDR	120 dB
BLC Mode	BLC/ HLC /HLC-Pro
Gain Control	Auto / Manual
Noise Reduction	2D NR/3D NR
White Balance	Auto / Manual
Smart IR	Support
Mirror	Off/On
Privacy Masking	Off/On (8 areas, rectangle)

Certifications

Certifications	FCC Part 15 subpart B,

Interface

Video Interface	1 BNC port Video output formats: AVS/ TVI/ AHD/ CVBS (Toggled by using DIP Switch)
Audio Interface	1Ch Input, Built-in mic
RS485	N/A
Alarm	N/A

Electrical

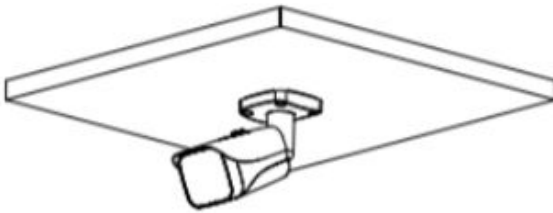|	
Power Supply	DC 12V ±30%
Power Consumption	Max 5.9W (12V DC, IR on)

Environmental

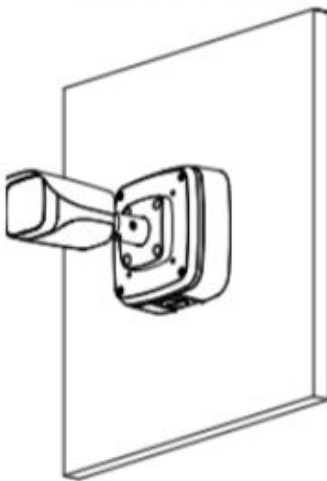|	
Operating Conditions	−40°F to +140°F (−40°C to +60°C); < 95% (non-condensation)
Storage Conditions	−40°F to +140°F (−40°C to +60°C); < 95% (non-condensation)
Ingress Protection	IP67
Vandal Resistance	N/A

Construction

Casing	Metal Casing/ Plastic Sun shade
Dimensions	7.08" × 2.75" × 2.75" (179.9 mm × 70 mm × 70 mm)
Net Weight	0.93 lb (0.42 kg)
Gross Weight	1.23 lb (0.56 kg)

Mounting

Included Mount

MNT-JUNCTIONBOX-4

Dimensions (mm/in)

179.9 [7.08]
105.8 [4.17]
94.9 [3.74]

70 [2.76]
70 [2.75]
⌀67.9 [⌀2.67]
4-⌀4.6 [⌀0.18]

69.3 [2.73]
62 [2.44]