AVS-B2218Z
2MP Starlight HD-AVS IR Bullet Camera

IC REALTIME

- Starlight, 120dB true WDR, 3DNR
- Max. 30fps@1080P
- HD/SD switchable
- Audio in interface, built-in mic
- 2.7-13.5mm motorized lens
- Max. IR length 80m, Smart IR
- IP67, DC12V±30%

System Overview

The AVSB2218Z is a 2 megapixel weather rated bullet camera. Utilizing the new HD-AVS technology allows for 1080p high resolution video and a 1000' functional distance. The AVSB2218Z is perfect for upgrading existing analog systems to a megapixel quality level.

HD-AVS cameras are only compatible with HD-AVS DVR systems, and cannot be used with standard definition recorders. By adopting this latest technology, previously existing analog CCTV systems can rapidly be upgraded to high definition by replacing both cameras and recorders with HD-AVS products!

Functions

4 Signals over 1 Coaxial Cable
HD-AVS technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio*, data and power. Dual-way data transmission allows the HD-AVS camera to interact with the AVR, such as sending control signal or triggering alarm. Moreover, HD-AVS technology supports PoC for construction flexibility.
* Audio input is available for some models of HD-AVS cameras.

Long Distance Transmission
HD-AVS technology guarantees long-distance and real-time transmission without any loss. It supports up to 800m for 1080P Full HD video via coaxial cable, and up to 300m via UTP cable.

Starlight
For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.006lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Broadcast-quality Audio
Audio information is used as supplementary evidence in video surveillance applications. The HD-AVS camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

Multiple-formats
The camera supports multiple video formats including HD-AVS, CVBS, and other two common HD analog formats in the market. 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

Wide Dynamic Range
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Protection
The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.

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Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Effective Pixels	1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/4s~1/100,000s NTSC: 1/3s~1/100,000s
Minimum Illumination	0.004Lux/F1.6, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 80m (262ft)
IR On/Off Control	Auto / Manual
IR LEDs	4

Lens

Lens Type	Motorized lens / Fixed iris
Mount Type	Board-in
Focal Length	2.7-13.5mm
Max. Aperture	F1.6
Angle of View	H: 108.7°~28.7°
Focus Control	Auto / Manual
Close Focus Distance	200mm 7.87"

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Wide	44m(144ft)	18m(59ft)	9m(30ft)	4m(13ft)
	Tele	153m(502ft)	61m(200ft)	31m(102ft)	15m(49ft)

Pan/Tilt/Rotation

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

Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
Video Output	1-channel BNC high definition video output / CVBS video output (DIP switch)
Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / WDR (120dB)
WDR	120dB
Gain Control	AGC
Noise Reduction	2D/3D
White Balance	Auto / Manual
Smart IR	Auto / Manual

Certifications

Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

Interface

Video Interface	1-channel BNC high definition video output / CVBS video output(switchable)
Audio Interface	1ch in & Built-in Mic
RS485	N/A
Alarm	N/A

Electrical

Power Supply	12V DC ±30%
Power Consumption	Max. 8.2W (12V DC, IR on)

Environmental

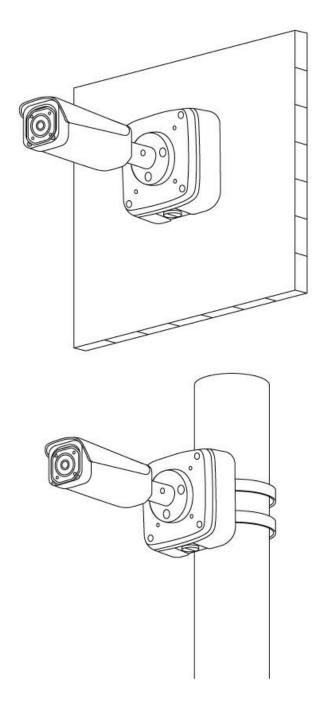|	
Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH *Start up should be done at above -30°C (-22°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

Construction

Casing	Aluminium
Dimensions	244.1mm×90.4mm×90.4mm (9.61"×3.56"×3.56")
Net Weight	0.76kg (1.68lb)
Gross Weight	1.02kg (2.25lb)

Mounting

Dimensions (mm/in)