B8220 | Extreme Bullet
2MP Motorized Outdoor IR Camera

ZAVIO

Innovating IP since 2006

- · 1/2.8" 2MP Starlight CMOS sensor
- · Motorized lens 2.8-12mm, F1.6, P-Iris
- · Smart Codec + H.265
- · 1080p @ 60fps
- · 120dB WDR

- · Smart Focus
- · 50m IR range with Adaptive IR
- · Built-in fan & heater
- · Operating conditions -50~ 60°C
- · Anti-Reflective & Anti-Smudge Coating

- · SD/SDHC/SDXC card slot up to 128GB
- · 2 alarm in / 2 alarm out
- · 12V DC & PoE (802.3af/at)
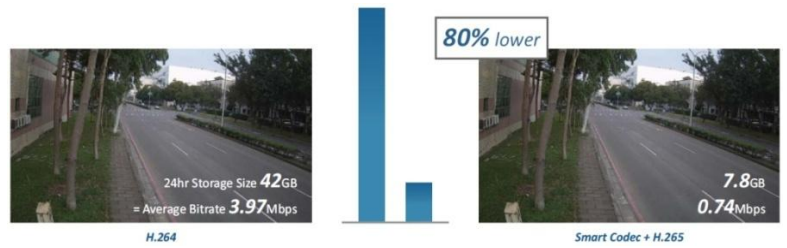- · IP67
- · ONVIF 2.4 & Profile S

ZAVIO B8220 bullet camera has it all. Latest H.265 compression to cut bandwidth in half, with ZAVIO's Smart Codec feature further lowering bandwidth and storage consumption to 80% less than normal H.264 cameras. Class-leading WDR to handle the most challenging lighting conditions. Superior low-light sensitivity that still sees when you don't. Adaptive IR that not only automatically adjusts the power of the IR LEDs, but also it's angle, to fit the view angle of the motorized lens, which can be easily focused by the Smart Focus function. Built-in fan and heater allow the camera to operate in the most extreme environments (-50°C to 60°C).

The B8220 can be used in all kinds of applications, ranging from traffic, airports to public area surveillance and extreme applications. To benefit from the camera's maximum potential, please use with ZAVIO NVRs and Management Software Z+. They provide seamless integration with ZAVIO IP cameras, featuring embedded camera settings and batch maintenance. Download ZAVIOR mobile APP to get instant access to your devices and manage them anytime anywhere.

Features

Smart Codec + H.265

ZAVIO Smart Codec + H.265 reduces bandwidth and storage requirements by a stunning 80% compared to standard H.264 camera.
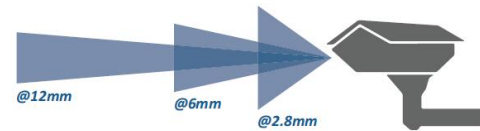

WDR

Cameras with WDR will take multiple exposures of the full scene and merge them together to provide an image that extends further than the human eye can perceive.
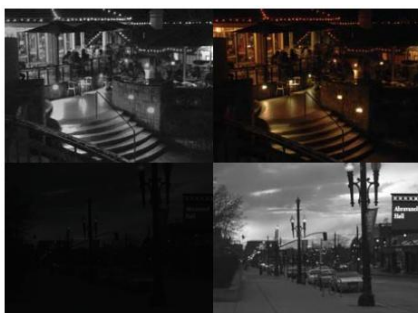

Adaptive IR

Provides 2 dimensions adaptation:
1) The angle of the IR illuminators automatically changes in sync with the camera's zoom position.
2) The brightness of the IR illuminators automatically adjusts to the scene content, effectively avoiding overexposure of objects that are too close to the camera.

Starlight

Combined with cutting-edge sensor technology, advanced noise reduction and high frame rate, Starlight cameras can capture highly detailed color images of fast moving objects even under challenging lighting conditions.

P-iris

P-iris allows objects at different distances from the camera to be focused simultaneously - providing images with better contrast, clarity, resolution and depth of field.

Features

High Performance IR

With a total of only 6 high performance IR LEDs, the camera is able to achieve IR range of up to 50meters distance without flashlight effect. Two IR LEDs for achieving wide angle illumination and four IR LEDs for achieving longer distance.

Anti Reflective & Anti Smudge coating

Anti Reflective (AR) coating reduces the reflection and lets more light pass through. Anti Smudge (AS) coating makes a smoother surface preventing contamination to stay on the glass. The combination of AR and AS coating results in low reflection, low loss of light and clean view of the scene.

Glass Demister

Dramatic changes in temparatures causes water droplets to show on glass, which in turn obstructs your clear view of the scene. ZAVIO Glass Demister solves this issue by turning up the heater and evaporating the water droplets off the glass.

Smart Focus control button

Smart Focus control buttons make installation much easier by allowing you to adjust the focus on site. Combined with the video output, you have everything you need to finish installation then and there.

Technical Specifications

Camera

Camera type	2MP Motorized Outdoor IR Bullet
Image sensor	1/2.8" Starlight CMOS sensor
Lens	Motorized 2.8-12mm, F1.6, P-iris
Horizontal view angle	104° - 33°
IR working distance	50m effective range with Adaptive IR
Min	0.001 lux @ F1.6 (color)
	0.0001 lux @ F1.6 (B/W)
WDR	120dB
Day/Night function	Mechanical IR cut filter, Light sensor

Video & Audio

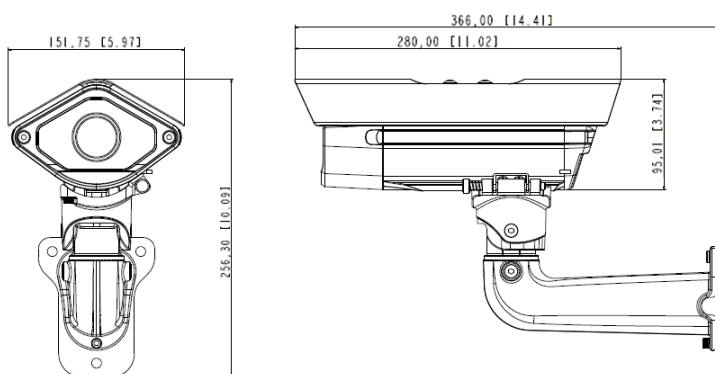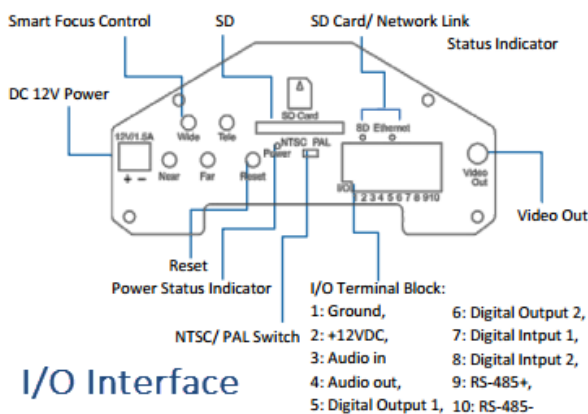|	
Resolutions	Motion JPEG/H.264/H.265:
	2 Profile from 1920 x 1080 to 320 x 240 (total 5 resolutions)
	2 Profile from 640 x 480 to 320 x 240 (total 3 resolutions)
Video compression	Motion JPEG
	H.264 baseline/ main profile/high profile
	H.265
Frame rate	H.265/H.264: up to 60 fps at 1920 x 1080
	Motion JPEG : up to 30 fps at 1920 x 1080
Video	Simultaneous Motion JPEG, H.264, H.265
	Controllable frame rate and bandwidth
	Support unicast and multicast (RTSP)
Image settings	Rotation: mirror, flip, mirror flip, corridor mode
	Brightness, contrast, saturation, sharpness
	Overlay capabilities: time, date, text and privacy Image
	ROI, White balance (auto/manual)
	3D DNR
	Defog
Audio support	Two-way (full duplex)
Audio compression	G.711 u law, a law, G.726, AMR

I/O & Connector

Ethernet	RJ-45 Ethernet 10/100 Base -T
Power Supply	Terminal block, 12V DC, 2A
	Power consumption: Max 19.2W
	PoE(Power over Ethernet) built-in IEEE 802.3af/at
Alarm I/O	Terminal block, 2/2
Audio connector	Terminal block, line in & line out
Analog video output	3.5mm Phone Jack
RS-485	Terminal block
Edge storage	SD/SDHC/SDXC up to 128GB
Buttons	Reset push button, Smart Focus control buttons
Other(s)	NTSC / PAL switch

Alarm & Event

Event type	Alarm input, motion detection, audio detection, periodical, network link down, tampering, tripwire, people density, perimeter.
Alarm action	Network storage, edge storage, FTP, SMTP, HTTP event, HTTPS, alarm out pre and post event image.

Network

Users	10 simultaneous users
Security	Multiple user access levels with password protection, HTTPS encryption
Supported protocols	IPv4, IPv6, Bonjour, TCP/ IP, DHCP, DNS, DynDNS, PPPoE, ARP, ICMP, FTP, SMTP, NTP, UPnP, RTSP, RTP, RTCP, HTTP, HTTPS, SSL, TCP, UDP
ONVIF	2.4 & Profile S

General

Housing	Aluminum Alloy
Ingress Protection	IP67 rated weatherproof housing
Impact Protection	-
Other(s)	Anti-Reflective glass coating, Anti-Smudge glass coating, Glass Demister, Built-in fan & heater.
Operating conditions	Starting temperature: -40 ~ 60°C Humidity 10-100% RH
	Working temperature: -50 ~ 60°C Humidity 10-100% RH
Dimensions	366 x 152 x 253mm, incl. bracket
Weight	1930g excl. power supply
Included accessories	Quick installation guide, bracket, mounting, connector kit.
Optional accessories	-
Certification	CE, FCC, RoHS
Language	Chinese, Croatian, Czech, Danish, Dutch, English, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Slovak, Spanish, Swedish, Turkish

System Requirements

Operating system	Windows XP / 7 / 8 / 8.1, MAC OS, Linux
Browser	Internet Explorer 9 / 10 / 11, Chrome, Firefox, Safari

I/O Interface

I/O Terminal Block:
1: Ground,
2: +12VDC,
3: Audio in
4: Audio out,
5: Digital Output 1,
6: Digital Output 2,
7: Digital Intput 1,
8: Digital Intput 2,
9: RS-485+,
10: RS-485-