

# D8220 | Extreme Dome 2MP Motorized Outdoor IR Camera

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**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
- 40m IR range with Adaptive IR
- Built-in fan
- Operating conditions -50~ 60°C
- Anti-Scratch Glass Coating
- SD/SDHC/SDXC card slot up to 128GB
- 2 alarm in / 2 alarm out
- 12V DC & PoE (802.3af/at)
- IP67 & IK10
- ONVIF 2.4 & Profile S

ZAVIO D8220 dome 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 illuminators, 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 allowing the camera to operate in the most extreme environments (-50°C to 60°C).

The D8220 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.

## Optional accessories

**Accessory:** Wall mount  
**Item number:** AD-M03  
**Dimensions:** 200 x 127mm  
**Compatible with:** D8220, D8520

Wall mount



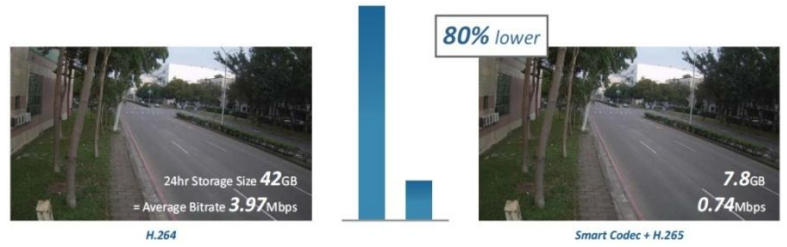
D8220 with wall mount



## 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 off



WDR on

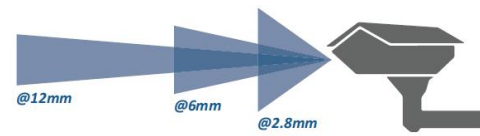
### WDR

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.



Adaptive IR: Off



Adaptive IR: On



Other Cameras

ZAVIO Starlight Cameras

### 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 few high performance IR LEDs, the camera is able to achieve IR range of up to 40meters distance without flashlight effect. Two IR LEDs for achieving wide angle illumination and seven on each side for achieving longer distance.



### Anti-Scratch Glass Coating

The hard coating makes the glass a lot more scratch-resistant, allowing installation to be less worrying.

### 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.



### Built-in Fan

Additional to being weatherproof (IP67), the camera also is designed with a built-in fan, allowing the camera to operate under extreme environments (-50°C to 60°C).

## Technical Specifications

### Camera

<b>Camera Type</b>	2MP Motorized Outdoor IR Dome
<b>Image sensor</b>	1/2.8" CMOS sensor
<b>Lens</b>	Motorized 2.8-12mm, F1.6, P-iris
<b>Horizontal view angle</b>	104° - 33°
<b>IR working distance</b>	40m effective range with Adaptive IR
<b>Min</b>	0.001 lux @ F1.6 (color) 0.0001 lux @ F1.6 (B/W)
<b>WDR</b>	120dB
<b>Day/Night function</b>	Mechanical IR cut filter, Light sensor

### Video & Audio

<b>Resolutions</b>	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)
<b>Video compression</b>	Motion JPEG H.264 baseline/ main profile/high profile H.265
<b>Frame rate</b>	H.265/H.264: up to 60 fps at 1920 x 1080 Motion JPEG : up to 30 fps at 1920 x 1080
<b>Video</b>	Simultaneous Motion JPEG, H.264, H.265 Controllable frame rate and bandwidth Support unicast and multicast (RTSP)
<b>Image settings</b>	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
<b>Audio support</b>	Two-way (full duplex)
<b>Audio compression</b>	G.711 u law, a law, G.726, AMR

### I/O & Connector

<b>Ethernet</b>	RJ-45 Ethernet 10/100 Base -T
<b>Power Supply</b>	Terminal block, 12V DC, 1.5A Power consumption: Max 14.7W PoE(Power over Ethernet) built-in IEEE 802.3af/at
<b>Alarm I/O</b>	Terminal block, 2/2
<b>Audio connector</b>	Terminal block, line in & line out
<b>Analog video output</b>	RCA
<b>RS-485</b>	Terminal block - Optional* (alarm I/O will only support 1/1)
<b>Edge storage</b>	SD/SDHC/SDXC up to 128GB
<b>Buttons</b>	Reset push button, Smart Focus control buttons
<b>Other(s)</b>	NTSC / PAL switch

### Alarm & Event

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

### Network

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

### General

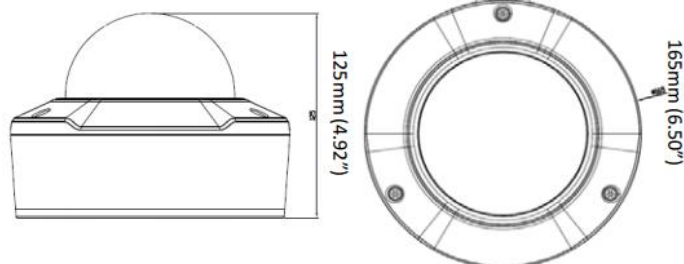
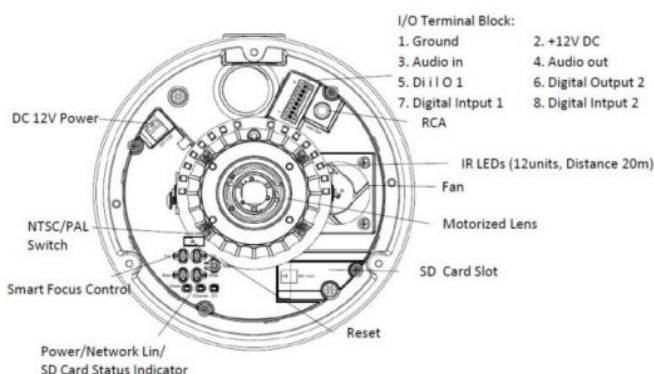
<b>Housing</b>	Aluminum Alloy
<b>Ingress Protection</b>	IP67 rated weatherproof housing
<b>Impact Protection</b>	IK10 rated vandalproof housing
<b>Other(s)</b>	Anti-Scratch Glass Coating Built-in Fan
<b>Operating conditions</b>	Starting temperature: -40 ~ 60°C Humidity 10-100% RH Working temperature: -50 ~ 60°C Humidity 10-100% RH
<b>Dimensions</b>	φ165 x 125mm
<b>Weight</b>	1670g excl. power supply
<b>Included accessories</b>	Quick installation guide, mounting and connector kit.
<b>Optional accessories</b>	Wall mount AD-M03
<b>Certification</b>	CE, FCC, RoHS
<b>Language</b>	Chinese, Croatian, Czech, Danish, Dutch, English, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Slovak, Spanish, Swedish, Turkish

### System Requirements

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

### Software

<b>Video management software</b>	ZAVIO CamGraba 2.0 IP System software, for viewing, recording and archiving up to 64 cameras.
<b>Installation, management and maintenance</b>	ZAVIO Installation Tool makes camera management easier camera image preview, firmware upgrade of multiple cameras, reset cameras to default while keeping network settings, etc.



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