# ZAVIO B7320 3MP WDR Outdoor Bullet IP Camera







- 3 megapixel CMOS sensor
- True WDR up to 100dB
- 4 high performance IR LEDs and up to 30m distance
- Built-in heater and fan
- IP66 weatherproof housing
- Varifocal































The 3 megapixel B7320 bullet IP camera is designed to withstand harsh outdoor and tough environment.

The B7320 can capture video at resolutions of up to  $1920 \times 1080$  (maximum  $2048 \times 1536$ ) at frame rates up to 30 fps. With true WDR (wide dynamic range) capability ensures that no part of the image is too bright or too dark, can provide clear image quality even at backlight conditions, making the B7320 ideal for high-contrast environments.

The IP 66-rated housing with -40°C to 60°C temperature protection, it makes the camera invulnerable to harsh rainstorms and scorching heat. B7320 also outfitted with IR LED illuminators and gives a viewing range of 30m to achieve excellent day & night functionality.

Besides, the included ZAVIO CamGraba 2.0 is the most professional NVR software for free bundled can support up to 64 IP cameras.

# **Related models**

Model Name	B7210	B7320	B7510
Feature	Outdoor IP66	Outdoor IP66	Outdoor IP66
	Full HD 1080p	3MP + WDR	5MP
	Varifocal	Varifocal	Varifocal
	ICR + IR 30m	ICR + IR 30m	ICR + IR 30m
	Built-in fan &	Built-in fan &	Built-in fan &
	heater	heater	heater



#### **Features**

- · 3 megapixel progressive scan CMOS sensor
- · 100dB true dynamic range
- · H.264 and Motion JPEG compression
- · 20 fps at 2048 x 1536, 30 fps at 1920 x 1080
- Day & night functionality with automatic removable IR-cut filter
- 4 high performance IR LEDs and up to 30m distance
- · 3 9mm, F1.3 varifocal, auto-iris lens
- · Analog video output through RCA connector
- · Built-in MicroSD/ SDHC card slot
- · Tampering detection

- · RTC with built-in battery
- Built-in heater and fan, enabling camera in severe environment (-40  $^{\circ}$  60 $^{\circ}$ C)
- · Power over Ethernet (IEEE 802.3af/at)
- · 2 x alarm input, 2 x alarm output
- · IP66 rated weatherproof housing
- · SSL v3 advanced HTTPS encryption
- · Supports Samba network storage
- · Multi-lingual user interface
- · ONVIF 2.3 and Profile S compliant
- Free 64 channels ZAVIO CamGraba 2.0 NVR software

# **WDR (Wide Dynamic Range)**

Dynamic range is the ratio of the maximum signal output of the sensor to the smallest signal output of the sensor. In other words, dynamic range is the ratio of the brightest portion (maximum output) of the image to the darkest portion (smallest output) of the image.

In a scene with extremely bright and dark areas or in backlight environment such as entryway, a typical camera would produce an image where objects in the dark areas would hardly be visible. WDR(Wide dynamic range) can solve this by applying techniques such as using different exposures for different objects in a scene to enable objects in both bright and dark areas to be visible. WDR IP cameras are usually recommended for situations where light enters a premise from various angles such as a multi-window room.



Conventional camera without wide dynamic range



Camera with wide dynamic range applied

# **Application**







- 1. Banking
- 2. High Latitude
- 3. Traffic

### **ZAVIO IP Surveillance Solutions**

# · Free Plug & Play Cloud Solution

You can watch Live Video on your computer or the mobile app on your iOS/ Android device. Setup is as easy as 1-2-3, and it's completely free!

Step 1. Now, go to sat.qlync.com

Step 2. Create your account

Step 3. Add cameras to your account

Supports ZAVIO IP Camera

(except F1100/F1105/B7320/B7510/D7320/D7510)

Please go to <u>zavio.com</u> for a list of Cloud Solution support camera models



#### · NVR Partners

ZAVIO IP Cameras are supported by a wide range of 3rd party NVR software and devices.

Please go to <u>zavio.com</u> for a list of our partners.

# · Free 64ch NVR Software

The most professional NVR software you can get for free!



#### · 4ch/8ch Standalone NVR

The easiest way to view, record and playback up to 8 Full HD cameras all in real-time.



#### · ONVIF

ONVIF 2.3 & Profile S compliant

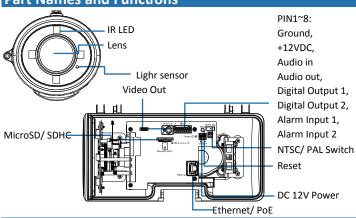


# **Technical Specifications**

Camera	07000 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Models	B7320 3 megapixel WDR day/night outdoor bullet
Image sensor	1/3" WDR CMOS sensor
Lens	F1.3, 3 ~ 9mm, vari-focal, auto-iris
Angle of view	30° ~ 87° horizontal; 22° ~ 64° vertical
Digital zoom	10x digital
Min illumination	0.05 lux @ F1.3 (color)
	0.001 lux @ F1.3 (B/W)
	0 lux @ F1.3 (IR LED on)
IR working distance	30m effective range
IR LEDs	High performance IR LED x 4 (850nm)
Day/Night function	Mechanical IR cut filter
Shutter time	1/2 ~ 1/10,000 sec.
Dynamic Range	Up to 100dB
Video	
Video compression	Motion JPEG
	H.264 baseline/ main/ high profile
Resolutions	Motion JPEG:
	8 resolutions from 2048 x 1536 to 320 x 240 via API,
	8 selections via configuration web page
	H.264
	8 resolutions from 2048 x 1536 to 320 x 240 via API,
	8 selections via configuration web page
Frame rate	Motion JPEG: up to 20 fps at 2048 x 1536
	30 fps at 1920 x 1080
	H.264: up to 20 fps at 2048 x 1536
	30 fps at 1920 x 1080
Video streaming	Simultaneous Motion JPEG, H.264 (multiple streaming)
	Controllable frame rate and bandwidth
Image settings	Rotation: mirror, flip, mirror flip
	Wide Dynamic Range (100dB)
	Brightness, contrast, saturation, sharpness
A -11-	Overlay capabilities: time, date, text and privacy Image
Audio	Two way (full divalay)
Audio streaming	Two-way (full duplex)
A	Line in & out
Audio compression	G.711 μ law, a law
Network	NAUltiple was a second and a with recovered protection
Security	Multiple user access levels with password protection,
C	HTTPS encryption
Supported protocols	Bonjour, TCP/ IP, DHCP, DNS, DynDNS, PPPOE, ARP,
	ICMP, FTP, SMTP, NTP, UPnP, RTSP, RTP, RTCP, HTTP,
	HTTPS, SSL, TCP, UDP, ISMA
Users	10 simultaneous users
Alawa and Eve	Unlimited number of users using multicast
Alarm and Eve	
Alarm and event	Input: alarm buffer, motion detection,
management	tampering detection Output: network storage, FTP, SMTP,
	-
Cuctom	pre-and post alarm buffer
System	PL 45 for Ethornot 10/100 Page T (with Page)
Connectors	RJ-45 for Ethernet 10/ 100 Base-T (with PoE)
	2 pin terminal blocks for DC power
	Terminal blocks for 2 alarm input, 2 alarm output,
	Audio line input, Audio line output
	Reset push switch
LED L. J.	RCA connector for analog video output
LED Indicator	Power status indicator
	Network link indicator
	MicroSD/SDHC card status indicator
General	
Casing	Aluminum casing
Housing	Weatherproof IP66-rated

AC power	PoE power requirement
requirement	12V DC, 1.5A; power consumption: max. 16.2W
& consumption	Note: while IR on, heater or fan would be activated
	automatically
PoE power	Power requirement:
requirement	Power over Ethernet IEEE 802.3af
& consumption	Note: while IR on, heater and fan will be disabled
	Power consumption: max. 11.1w
	Power over Ethernet IEEE 802.3at
	Note: while IR on, heater or fan would be activated
	automatically
	Power consumption: max. 16.2w
Heater & fan	Built-in and auto activation
	Note: Heater will be activated while the B7320 inner
	temperature drops under 5°C and fan over 50°C
Operating conditions	-40 °C ~ 60 °C (-40 ~ 140 °F)
Installation,	ZAVIO camera management tool on CD and
management, and	web-based configuration. Configuration of backup
maintenance	and restore firmware upgrades over HTTP, firmware
	available at www.zavio.com
Minimum web	Pentium 4 2.8GHz (or equivalent AMD)
browsing	256MB RAM graphic cards
requirement	(or equivalent on-board graphic cards)
	1G RAM
	Windows XP, Vista or Windows 7
	Mac OS Leopard 10.5 or later
Dimensions	360 x 125 x 250mm (14.2" x 4.9" x 9.8")
(HxWxD)	
Weight	1830.8g (4.05lb) excl. power supply
Included accessories	Quick installation guide, CD (IP surveillance software,
	IP installer, user manual, and language packs), mounting
	and connector kits
	Note: AC power supply not included
Certification	CE, FCC, RoHS
Integration	
Video management	ZAVIO CamGraba 2.0 IP System software, for viewing,
software	recording and archiving up to 64 cameras

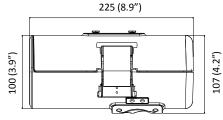
#### **Part Names and Functions**

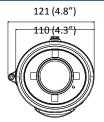


for more software application

See http://www.zavio.com/product.php?id=50

# **Dimensions**





Unit: mm (inches)



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