BioSis

12 MP (4K Ultra HD) Outdoor IR IP Mini Dome Cameras

HD8401

Biosis is taking quality and reliability to the next level with the new line of 4K Ultra HD IP cameras. The Biosis outdoor TDN Ultra HD IR mini dome cameras offer incomparable picture clarity, hassle- free flexible system integration, and secure data transmission—and they install easily too!

Ultra HD 4K Image Quality

- Ultra HD 12 MP (4K) 20 fps image with a 1/1.7" 12 megapixel progressive scan CMOS or full HD 8 MP 25/30 fps image
- Digital WDR (DWDR) ensures glare-free images
- True Day/Night provides vivid colour images by day and clear black-and-white images at night using a removable IR cut filter
- Excellent low-light performance with 3D noise reduction, saving storage and bandwidth together with H.265 Profile codec

Flexible Surveillance Solution

- 4.1–12.8 mm, F1.53, motorized focus/zoom lens
- H.265, H.264 and MJPEG codec, triple stream support
- IR LEDs provide up to 45 m (145 ft) of illumination in dimly lit or nighttime scenes (depending on scene reflectance)
- Smart IR technology provides even distribution of IR
- Waterproof (IP67) and IK10 impact-resistant camera housing
- −40°C to 60°C (−40°F to 140°F) working temperature
- ONVIF Profile S and G compliant
- Security features include individual signed certificates and data encryption
- Cameras can be retrofitted on many existing NVR installations without requiring additional storage

Easy to Install and Use

- Built-in PoE+ (Power over Ethernet 802.3at) eliminates separate power supply and associated wiring; 24 V AC/12 V DC inputs where PoE power is unavailable
- Remote configuration, motorized zoom adjustments and auto focus through web client or from the NVR
- Included accessories: security screw driver, 4S mount adapter, rubber gasket, and conduit adapter

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Onboard Video Storage

Supports up to 128 GB microSDHC (Class 10) card for local video storage when network is interrupted. Card not included.

Market Opportunities

These fully featured attractive cameras are perfect for outdoor installations that require excellent picture quality at minimal bandwidth while offering maximum protection against dust, dirt, and water. Boasting a sleek modern design and offering 4K high definition images, the cameras are suited for a wide range of applications.

FEATURES

- Ultra HD 4K/12 MP resolution at 20 fps or 8 MP at 25/30 fps
- Up to triple stream support
- 45 m (145 ft) IR distance, depending on scene reflectance
- 1/1.7" 12 megapixel progressive scan CMOS imager

- Excellent low light performance with down to 0 lux BW (with IR LEDs on)
- Digital WDR
- Choice of 24 V AC, 12 V DC or PoE+ (802.3at) power inputs

- 4.1–12.8 mm, F1.53, motorized focus and zoom lens
- Rugged outdoor housing with IP67 ingress protection rating and IK10 impact resistance rating

- Corridor mode viewing capability
- Onboard camera storage up to 128 GB microSD card (not included)
- ONVIF profile S and G compliant

- Built-in cyber security hardware chipset
- Global language support with QIGs, Web GUI, and online help in 15 languages

HD8401 Technical Specifications

OPERATIONAL	
Video Standard	NTSC/PAL
Scanning System	Progressive scan
Image Sensor	1/1.7" 12 MP progressive CMOS
Number of Pixels (H×V)	4000x3000
Minimum Illumination	0.02 lux colour @ F1.53, 0 lux B/W with IR LEDs on @ F1.5
S/N Ratio	50 dB
Electronic Shutter Speed	Auto, Manual, 1/3(4)–1/100 000 s
IR Distance	Up to 145 ft (45 m), depending on scene reflectance
Day/Night	Auto(ICR)/Colour/BW
Backlight Compensation	BLC/HLC/DWDR/SSA
Wide Dynamic Range	Digital WDR (DWDR).
White Balance	Auto/Natural/Street Lamp/Outdoor/Customize Region
Gain Control	Auto/Manual
Noise Reduction	3DNR
Privacy Masking	Up to 4 configurable areas
Corridor Mode	Yes
Electronic Image Stabilization	Off/On
Defog	Auto/Manual/Off
Lens	4.1–12.8 mm, MFZ, F1.53
Horizontal Angle of View	112º–35º
Audio/Two-Way	Line In/Out
Alarm Input/Output	2/1
Ethernet	RJ-45 (10/100/1000Base-T)

IP SPECIFICATIONS		
Video Compression		H.265/H.264+/H.264/MJPEG Bit rate control (CBR and VBR)
Resolution	16:9	8MP (3840×2160) / 3MP (2304×1296) / 1080p (1920×1080) / 720p (1280×720)
	4:3	12MP (4000×3000) / 5MP (2560×1920) / 3MP (2048×1536) / 1.3MP (1280×960) / VGA (640×480) / CIF (352×288/352×240)
	Other	8MP (4096×2160) / 6MP (3072×2048) / SXGA (1280×1024) /D1 (704×576/704×480)
Frame Rate	Main Stream	12MP (4000×3000) 1–20 fps /8MP (4096×2160) or lower resolution at 1–25/30 fps
	Sub Stream	D1/VGA/CIF up to 25/30 fps
	Triple Stream	1080p/720p/D1/VGA up to 25/30 fps
Audio Compression		G.711a/G.711Mu/AAC/G.726
Audio Stream		Full duplex, simplex
SD Card Function		• Event trigger recording • Continuous and scheduled recording • Automatic recording when network fails

IP SPECIFICATIONS (CONT'D)	
SD Card	Up to 128 GB microSDHC card, Class 10 (not included)
Protocols*	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, SSL, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, Bonjour, DNS, DDNS, IEEE 802.1X, QoS, NTP, IP Filter, Multicast, ONVIF
Compatibility	ONVIF Profile S/G
Max. User Access	20 users
Supported Web Browsers	Internet Explorer (11.0+), Firefox, Chrome
Supported OS	Windows 7 32-bit/64-bit, Windows 10
Security	Multiple user access levels with enhanced password policy, IP filtering, IEEE 802.1X, strong digest authentication for access permission, HTTPS, TLS1.2 only, high-strength encrypted algorithm AES-256, SSH/Telnet closed, FTP disabled to reduce surface being attacked, PCI-DSS compliant, built-in cybersecurity hardware chipset
Languages Supported	English,

ELECTRICAL	
Power Supply	PoE+ (802.3at) Class 4, 12 V DC/24 V AC
AC Frequency	50/60 Hz
Power Consumption	18 W max. (IR LEDs on and motorized lens working)

MECHANICAL	
Dimensions	159.0 × 118.0 mm (6.2 × 4.6 in.)
Product Weight	2.3 lb (1.05 kg)
Package Weight	4.6 lb (2.1 kg)
Construction	Die-cast aluminum housing with powder coat
Construction Colour	RAL9003 (White)

ENVIRONMENTAL	
Temperature	–40ºC to 60ºC (–40ºF to 140ºF)
Relative Humidity	Less than 95%, non-condensing
Ingress Protection	IP67
Impact Resistance	IK10

REGULATORY	
Emissions	EN 55032, FCC Part 15B, AS/NZS CISPR 22:2009+ A1 (2010)
Immunity	EN 50130-4
Safety	EN 60950-1, EN 60950-22, UL Listed to UL/CSA 60950-1, UL/CSA 60950-22
RoHS	EN 50581

*Specification may change without notice