## Evolution 12 360° Outdoor Camera

The next step in 360° Total Situational Awareness



### 12MP Exmor R high-resolution sensor

- Constant 360° surveillance; no blind spots
- No moving parts; no maintenance; silent operation
- Using a 12MP 1/2.3" Exmor R sensor for high resolution and high quality images even in low-light conditions
- 12fps at 9.6MP max resolution; up to 30fps at 2.0MP
- 0.1 lux minimum illumination; providing clarity in low light
- PoE or 12VDC powered
- 3-years warranty

#### Advanced event management

- Local 3D dewarping providing 4x Vcams at 1MP each
- SD Card local recording and advanced event management
- Up to 10 configurable privacy regions
- Up to 16 polygonal Video Motion Detection regions
- · Local alarm digital input and output
- Audio microphone input

#### Multiple mounting possibilities

- Quick and easy installation
- IK10 / IP67 professional rugged and light weight enclosure
- Pleasing aesthetics in either black or white finish
- Convenient surface-mounting enclosure
- Suitable for ceiling, wall or table mounted applications
- A range of mounting accessories allows for ceiling, wall, pole and pendant mounting



## Extensive VMS platform integration with full live and retrospective dewarping

- Market leading Oncam 3D dewarping software
- Camera features are accessible via VMS platforms
- Simultaneous multiple video streams; with resolutions from 544x512 to 3200x3000
- 10x zoom capability through client-side dewarping
- H.264/MJPEG streaming with multiple quality levels
- Configurable password protection
- Intuitive web-based interface for viewing and configuration
- Integrated with Digital Sentry (version 7.12) and other leading VMS platforms







## **TECHNICAL SPECIFICATION**

# Evolution 12 360° Outdoor Camera

The next step in 360° Total Situational Awareness

Model	EVO-12NMD (White)	EVO-12NND (Black)				
General						
Field of View	360°					
Image Sensor	12 megapixel; Array Format (Active) 3552H x 3000V = 10,656,000 pixels; 1/2.3-Inch Sony CMOS Sensor					
Angle of View	180° hem	isphere				
Lens	185° / F2.0					
Minimum Illumination	0.1 lux = 50 IRE F/2.0					
Frame Rate	12 fps typical at maximum resolution					
Video Motion Detection	16 polygonal regions; configurable response; adjustable characteristics					
External Input	1x contact input					
External Output	1x contact output					
Security	Configurable password protection					
Advanced Event Management	Triggered by motion, external input or HTTP event, result configurable; external output, FTP/SMTP upload, Local recording					
Networking / Supported IP Protocol	TCP/IP, HTTP, DHCP, DNS, NTP, FTP, SMTP, RSTP					
Privacy	10 configurable privacy regions					
SD Card	Built-in SD Card slot					
Audio Connections	Audio In and Audio out via 3.5mm jack; via RTSP using G711 codec; via ONVIF S					
Analogue Video Out	BNC connection – selectable between PAL or NTSC					
Signal-to-Noise Ratio	45dB					
White Balance Range	Auto White Balance (Range = approx. 2500K~8000K)					

Video				
Video Stream 1 Codec	H.264 in 9.6MP, 6MP, 4MP			
Video Stream 1 Compression Level	Multi-levels of compression adjustment			
Video Stream 1 Pixel Resolution	Fisheyes at: 4MP (2080x1960), 6MP (2528x2376), 9.6MP (3200x3000)			
Video Stream 2 Codec	H.264 in 4MP, 2MP, 1MP and 1/4MP			
Video Stream 2 Compression Level	Multi-levels of compression adjustment			
Video Stream 2 Pixel Resolution	Fisheyes at: 1/4MP (544x512), 1MP (1056x992), 2MP (1472x1384), 4MP (2080x1960)			
Video Stream 3 Codec	MJPEG in 4MP, 2MP, 1MP and 1/4MP			
Video Stream 3 Compression Level	Multi-levels of compression and frame rate adjustment (max 14fps)			
Video Stream 3 Pixel Resolution	Fisheyes at: 1/4MP (544x512), 1MP (1056x992), 2MP (1472x1384), 4MP (2080x1960)			
Video Stream 4, 5, 6, 7 Codec	H.264 Only			
Video Stream 4, 5, 6, 7 Compression Level	Multi-levels of compression and frame rate adjustment (up to 30fps)			
Video Stream 4, 5, 6, 7 Pixel Resolution	4x independent onboard dewarped Vcams at: VGA (640x480), 1MP (1280x768)			
Image Control	Settings: brightness/contrast/saturation/exposure compensation; compression quality; wall/ceiling/table mount			
Image Enhancement	Electronic WDR 60dB			
PTZ Functionality	10x zoom with Oncam 3D client-side dewarping software			
VMS / NVR / HDVR Supported	Integrated with Digital Sentry (version 7.12) and other leading VMS platforms			
Web Browser Compatibility	Internet Explorer IE9 (with ActiveX plug-in, supplied); Firefox 23; Chrome 29; using Quicktime, minimum version 7			
Unicast	Up to 20 simultaneous users depending on the resolutions settings			
Multicast	Supported for H.264 main camera stream			
Bit Rate Control	Selectable options: constant bit rate control; capped bit rate control; constant quality control			

# Evolution 12 360° Outdoor Camera

The next step in 360° Total Situational Awareness

Electrical	
Ports	RJ45 for 100Base-TX 2.1mm DC Input jack 6-pin 1.5mm Phoenix for external I/O BNC for test video output
Network Cable Type	CAT5 or better for 100Base-TX
Power Input	12V, 1.0A (min) "LPS or NEC Class 2" power supply or Power over Ethernet (PoE), IEEE standard 802.3af
Power Consumption (max)	9.4W (PoE) / 7.7W (DC12V)

Mechanical	
Camera Mount	Surface mount (or with a range of mounting accessories for mounting to a pole / wall / pendant)
Weight	0.92kg (2.03lbs)
Dimensions (LxWxH)	178.2x159.2x109mm / 7.0"x6.2"x4.29"
Enclosure	All-aluminium die-cast base enclosure with clear polycarbonate dome bubble and cover trim plate

Environmental	
Operating temperature range	-40 to +55°C (-40 to +131°F)
Storage temperature range	-40 to +70°C (-40 to +158°F)
Operating Humidity	Up to 98% (In accordance with BS EN 60068-2-30)
Ingress Protection Rating	IP67-rated
Impact Resistance	IK10-rated

Certifications	
Approvals	IEEE802.3af Class 2; EMC: (CISPR Class A) FCC; CE; ICES-003; KCC; SASO; GOST; S-MARK; C-TICK; UL and cUL-UL60950

Other Related Products	
Hardware/Software Solutions	Oncam SDK integration pack, Evolution 5MP/12MP Camera Range,
	Evolution Accessories, IP Configuration Tool, 360-degree Viewer, OnVu360 Mobile Apps (iOS, Android)

H.264 Frame Rate, Resolution & Storage Needs					
9.6MP	3200x3000	12fps	Constant bit rate settings	10 Mbits/s	24hrs = 101GB **
6MP	2528x2376	14fps	Constant bit rate settings	7.5 Mbits/s	24hrs = 76GB **
4MP *	2080x1960	14fps	Constant bit rate settings	5 Mbits/s	24hrs = 51GB **
2MP	1472x1384	30fps	Constant bit rate settings	3 Mbits/s	24hrs = 31GB **
1xVcam (1MP) from 9.6MP stream	1280x768	11fps	Constant bit rate settings	1.5 Mbits/s	24hrs = 16GB **
4xVcam (1MP) from 9.6MP stream	1280x768	5fps	Constant bit rate settings	6.0 Mbits/s	24hrs = 64GB **
1xVcam (VGA) from 9.6MP stream	640x480	12fps	Constant bit rate settings	0.8 Mbits/s	24hrs = 1GB **
4xVcam (VGA) from 9.6MP stream	640x480	9fps	Constant bit rate settings	3.2 Mbits/s	24hrs = 4GB **

<sup>\*</sup> Factory / Default settings

#### Notes

Values for frame rate, size and bandwidth are approximate and are influenced by compression, quality settings, number of simultaneous viewers and the amount of detail as well as any movement in a scene.

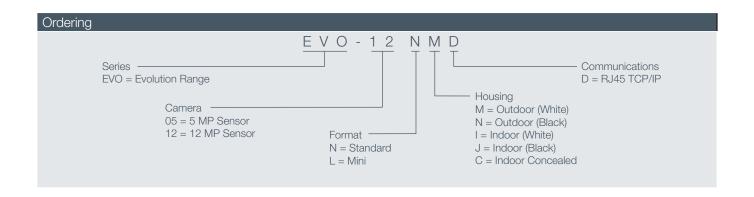
<sup>\*\*</sup> Based on the same scene, with constant average light conditions

## Evolution 12

### 360° Outdoor Camera

The next step in 360° Total Situational Awareness

Evolution Accessories				
Image	Part	Product Code	Colour	Compatible With
	Outdoor Pendant Mount	OBE-01-OWA	White	Evolution Outdoor Camera
		OBE-01-OBA	Black	
	Pole Mount Bracket	OBE-03-OWA	White	Evolution Indoor / Outdoor Camera
		OBE-03-OBA	Black	(to be used with Pendant Mount)
	Wall Mount Bracket	OBE-04-OWA	White	Evolution Indoor / Outdoor Camera
		OBE-04-OBA	Black	(to be used with Pendant Mount)
	Corner Bracket	OBE-05-OWA	White	Evolution Indoor / Outdoor Camera
		OBE-05-OBA	Black	(to be used with Pendant Mount)
	Outdoor Sunshield	OBE-14-OWA	White	Evolution Outdoor Camera
		OBE-14-OBA	Black	(to be used with Pendant Mount)



## Evolution 12 360° Outdoor Camera

The next step in 360° Total Situational Awareness

#### Dimensions

