# **Evolution**360° Outdoor Dome Camera

Taking the next step in 360° total situational awareness



### Vandal resistant 360° IP camera with a 5-megapixel sensor and no moving parts

- Constant 360° surveillance; no blind spots
- Silent operation as there are no mechanical parts
- No moving parts means no regular maintenance due to wear and tear
- Vandal-resistant enclosure

### Ideal when IP66 standard ingress protection is required

- Fully supports IEEE802.3af Class 2 Power over Ethernet (PoE)
- Quick and easy installation
- Professional and rugged enclosure to withstand a range of harsh and humid environments, Impact Resistance IK10
- Pleasing aesthetics in either black or white finish
- Minimum illumination 0.2 lux, providing clarity in low lights
- 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

# Onboard SD card and advanced event management

- Onboard SD Card for future local recording feature and advanced event management
- Configurable privacy regions
- Video Motion Detection within defined areas of interest
- Local alarm digital input and output
- Audio microphone input



## Fully integrated with multiple VMS platforms to provide live and retrospective dewarping

- Utilising the market leading Oncam Grandeye Grandeye 3D dewarping software
- Camera features are accessible via VMS platforms
- Optimises bandwidth and storage utilisation
- Simultaneous multiple video streams
- Video streams in multiple resolutions from 528x480 to 2144x1944
- 10 fps typical for full resolution and up to 15 fps for all other resolutions
- H.264/MJPEG streaming with multiple quality levels
- Configurable password protection
- Intuitive web-based interface for viewing and configuration
- Integrated with Digital Sentry version 7.5 and other leading VMS platforms







### TECHNICAL SPECIFICATION

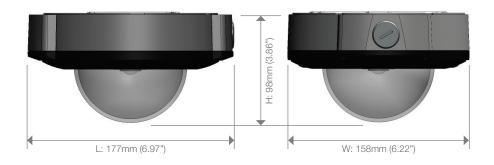
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Model	EVO-05NMD (White enclosure)	EVO-05NND (Black enclosure)		
General				
Field of View	360°			
Image Sensor	5 megapixel; Array Format (Active) 2592H x 1944V = 5,038,848 pixels; 1/2.5-Inch CMOS Sensor			
Angle of View	180° hemisphere			
Lens	185° 1.6mm / F2.0			
Minimum Illumination	0.2 lux = 50 IRE F/2.0 (6500k)			
Frame Rate	10 fps typical at maximum resolution and up to 15 fps for all other resolutions			
Video Motion Detection	12 regions of interest; VMD; 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, future feature via firmware update)			
Networking	TCP/IP, HTTP, DHCP, DNS, NTP, FTP, SMTP, RSTP, uPNP			
Privacy	10 configurable priv	acy regions		
SD Card	Built-in SD Card slot (future feat	ure via firmware update)		
Audio Connections	Audio in; Microphone input via 3.5mm jack; via RTSP using	G711 codec (µLaw - 8K sample rate); via ONVIF S		
Analogue Video Out	BNC connection – selectable between F	PAL or NTSC - used for test only		
Signal-to-Noise Ratio	45dB			
White Balance Range	Auto White Balance (Range = approx. 2500K~8000K)			
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 1	00Base-TX		
Power Input	12V, 1.0A (min) "LPS or NEC Class 2" power supply or Power over Ethernet (PoE), IEEE standard 802.3a			
Power Consumption	8W max			
Video				
Video Stream 1 & 2 Codec's	H.264 High, Level 5 / MJPEG (bo	oth streams configurable)		
Video Stream 1 & 2 Compression Level	Multi-levels of compress	sion adjustment		
Video Stream1 & 2 Pixel Resolution	Fisheyes at: 1/4 MegaPixel (528x480), 1MP (1056x960), 2MP (1488x1360), 4MP (2144x1944)			
Video Stream 3 Codec	MJPEG			
Video Stream 3	Multi-levels of compression and frame rate adjustment (max 15fps)			
Video Stream 3 Pixel Resolution	Fisheye at: 1/4 Megapixel (528x480)			
Image Control	Settings: brightness/contrast/saturation/exposure compensation; compression quality; wall/ceiling/table mo			
Image Enhancement	Wide Dynamic range - Greater than 90db			
VMS Supported	Integrated with Digital Sentry version 7.5 and other leading VMS platforms			
Web Browser Compatibility	Internet Explorer IE9 (with ActiveX plug-in, supplied); Firefox 23; Chrome 29; using Quicktime, minimum version			
Number of Unicast Users Supported	Up to 20 simultaneous users depending on the resolutions settings			
Bit Rate Control	Selectable options; constant bit rate control, capped bit rate control, constant quality control			





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Minimum System Requirements			
Processor and Memory	Computer with 1Ghz 32-bit (x86) or 64-bit (x64) processor and with minimum of 512 MB		
Operating System	Windows Vista 32-bit with service pack 2 (SP2) of higher / 64-bit with service pack (SP2) of higher		
Hard Drive Space	Windows Vista 32-bit = minimum 70MB / Windows Vista 64-bit = minimum 120MB		
Display	Super VGA (800 x 600) of higher-resolution monitor with 256 colours		
Peripherals	100Mbits or greater network connection, mouse or compatible pointing device, keyboard		
Mechanical			
Camera Mount	Surface mount (or with a range of mounting accessories for mounting to a pole / wall / pedant)		
Weight	0.92kg (2.03lbs)		
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)		
Shock and Vibration	In accordance with BS EN 60068-2-64 and BS EN 60068-2-27		
Ingress Protection Rating	IP66-rated		
Impact Resistance	IK10-rated		
Certifications / Ratings / Patents			
Patents	15 patents; 15 patents pending; 20 licensed patents		
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	Oncam Grandeye SDK integration pack, Evolution Accessories, IP Configuration Tool, 360-degree Viewer, OnVu360 Mobile Apps (iOS, Android)		

Frame Rate, Resolution & Storage Needs							
H.264							
4MP *	2144 x 1944	10fps	Constant bit rate settings	5 Mbits/s	24hrs = 54GB **		
2MP	1488 x 1360	15fps	Constant bit rate settings	3 Mbits/s	24hrs = 40GB **		
1MP	1056 x 1056	15fps	Constant bit rate settings	1.5 Mbits/s	24hrs = 16GB **		
1/4MP	528 x 480	15fps	Constant bit rate settings	0.8 Mbits/s	24hrs = 8GB **		
MJPEG							
4MP	2144x1944	10fps	Average file size: 640KB	Average bit rate: 52.4 Mbits/s	24hrs = 552.96GB **		
2MP	1488x1360	15fps	Average file size: 350KB	Average bit rate: 43.0 Mbits/s	24hrs = 453.60GB **		
1MP	1056x1056	15fps	Average file size: 188KB	Average bit rate: 23.1 Mbits/s	24hrs = 243.65GB **		
1/4MP	528x480	15fps	Average file size: 62KB	Average bit rate: 7.6 Mbits/s	24hrs = 80.35GB **		

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

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

Evolution Accessories								
Image	Part	Product Code	Colour	Compatible With				
	Outdoor Pendent Mount	OBE-01-OWA	White	Evolution Outdoor Camera				
		OBE-01-OBA	Black					
	Outdoor Sunshield	OBE-02-OWA	White	Evolution Outdoor Camera (to be used with Pendant Mounts)				
		OBE-02-OBA	Black					
	Pole Mount Bracket	OBE-03-OWA	White	Evolution Indoor / Outdoor Camera				
		OBE-03-OBA	Black	(to be used with Pendant Mounts				
	Wall Mount Bracket	OBE-04-OWA	White	Evolution Indoor / Outdoor Camera				
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	Corner Bracket	OBE-05-OWA	White	Evolution Outdoor Camera (to be used with Outdoor Pendant				
		OBE-05-OBA	Black	Mount)				

