

Evolution

360° Indoor Concealed Camera

Taking the next step in 360° total situational awareness



ONCAM
GRANDEYE

5-megapixel sensor and no moving parts

- Constant 360° surveillance; no blind spots
- Silent operation as there are no mechanical parts wear and tear
- Light weight enclosure that can be completely concealed behind ceilings or walls voids
- False wall or ceiling thickness of between 3mm (1/4") and 25mm (1")

A truly covert installation with the lowest profile available

- Fully supports IEEE802.3af Class 2 Power over Ethernet (PoE)
- Quick and easy installation
- Professional indoor enclosure
- Pleasing aesthetics in either white or black finish
- Minimum illumination 0.2 lux, providing clarity in low lights
- Convenient surface-mounting enclosure
- Suitable for ceiling, wall or table mounted applications

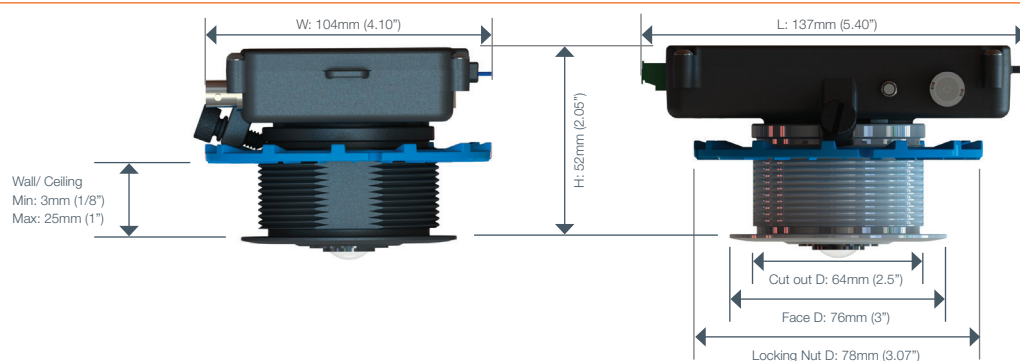
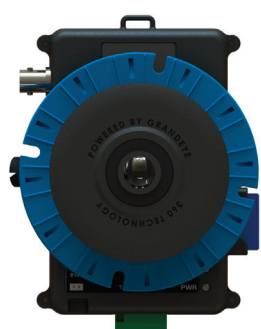
Onboard SD card and advanced event management

- 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
- Supports major VMS / NVR / HDVR systems



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TECHNICAL SPECIFICATIONS

Model	EVO-05NCD
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
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 / Supported IP Protocol	TCP/IP, HTTP, DHCP, DNS, NTP, FTP, SMTP, RSTP
Privacy	10 configurable privacy regions
SD Card	Built-in SD Card slot (future feature 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 PAL or NTSC
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 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	8W max
Video	
Video Stream 1 & 2 Codec's	H.264 High, Level 5 / MJPEG (both streams configurable)
Video Stream 1 & 2 Compression Level	Multi-levels of compression adjustment
Video Stream 1 & 2 Pixel Resolution	Fisheyes at: ¼ 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: ¼ Megapixel (528x480)
Image Control	Settings: brightness/contrast/saturation/exposure compensation; compression quality; wall/ceiling/table mount
Image Enhancement	Wide Dynamic range - Greater than 90db
VMS / NVR / HDVR Supported	Most major VMS / VMS / HDVR systems (contact Oncam Sales for latest list)
Web Browser Compatibility	Internet Explorer IE9 (with ActiveX plug-in, supplied); Firefox 23 ; Chrome 29; using Quicktime, minimum version 7
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
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	100Mbps or greater network connection, mouse or compatible pointing device, keyboard

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Mechanical	
Camera Mount	Behind ceiling or wall to conceal the camera module from view via flush mounted adaptor ring
Weight	0.45kg (0.95lbs)
Enclosure	Die-cast aluminium camera module with polycarbonate mounting adaptor and clamping ring
Cut out Required	Diameter cut out; 64mm (2 1/2"), Max / Min ceiling or wall material thickness; 3mm (1/4") – 25mm (1")

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)

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; Safety: UL60950
Other related products	Oncam Grandeye SDK integration pack, Evolution Accessories, IP Configuration Tool, 360-degree Viewer, OnVu360

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 **

* Factory / Default settings

** Based on the same scene, with constant average light conditions

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.

