Evolution

360° Indoor Concealed Camera

Taking the next step in 360° total situational awareness

ONCAM

360° indoor IP camera with a 5MP sensor and no moving parts

- Constant 360° surveillance; no blind spots
- No moving parts; no maintenance; silent operation
- Up to 30fps @1MP and 1/4MP
- 0.2 lux minimum illumination; enhanced WDR
- PoE or 12VDC powered
- 3-years warranty

Advanced event management

- SD Card for 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

Onvif | S

Extensive NVR/VMS platform integration; Full live and retrospective dewarping

- Market leading Oncam Grandeye 3D dewarping software
- Camera features are accessible via VMS platforms
- Simultaneous multiple video streams; with resolutions from 528x480 to 2144x1944
- 8x zoom capability through client-side dewarping
- H.264/MJPEG streaming with multiple quality levels
- Optimises bandwidth and storage utilisation
- Configurable password protection
- Intuitive web-based interface for viewing and configuration
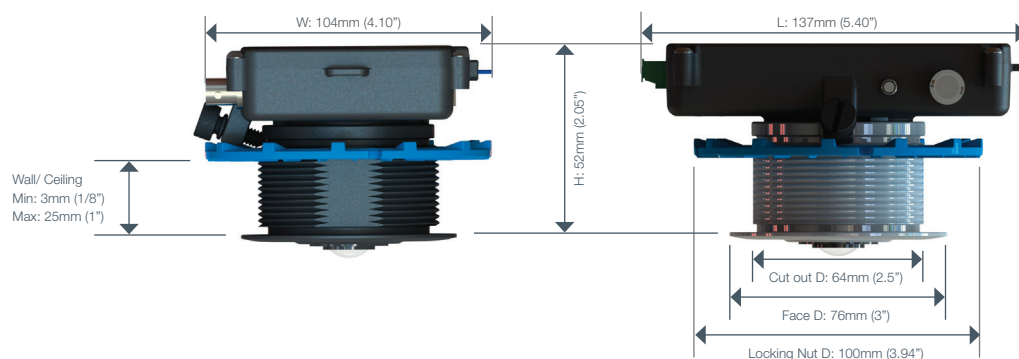- Supports major VMS / NVR / HDVR systems

A truly discreet installation with the lowest profile available

- Quick and easy installation
- Professional light weight enclosure that can be completely concealed behind ceiling or wall voids
- Pleasing aesthetics in either white or black finish
- Can fit 3mm (1/4") to 25mm (1") wall or ceiling thickness
- Convenient surface-mounting enclosure
- Suitable for ceiling, wall or table mounted applications

W: 104mm (4.10")

L: 137mm (5.40")

H: 52mm (2.05")

Wall/ Ceiling
Min: 3mm (1/8")
Max: 25mm (1")

Cut out D: 64mm (2.5")

Face D: 76mm (3")

Locking Nut D: 100mm (3.94")

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TECHNICAL SPECIFICATIONS

Model	EVO-05-NCD
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	30fps typical for 1MP resolution and ¼MP resolution, 15fps typical for 2MP resolution and up to 10fps for 4MP full 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 (with firmware 1.8.1)
Networking / Supported IP Protocol	TCP/IP, HTTP, DHCP, DNS, NTP, FTP, SMTP, RSTP, uPNP
Privacy Regions	10 configurable privacy regions
SD Card	Built-in SD Card slot
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	4.032W (PoE) / 3.144W (DC12V)
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	Electronic WDR 60dB
PTZ Functionality	8x zoom with Oncam Grandeye 3D client-side dewarping software
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	100Mbits 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 ½"), Min / Max 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; KCC; SASO; GOST; S-MARK; C-TICK; UL and cUL-UL60950

Other Related Products	
Hardware/Software Solutions	Oncam Grandeye SDK integration pack, Evolution 5MP Camera Range, 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 **

* Factory / Default settings
** Based on the same scene, with constant average light conditions

Ordering

E V O - 0 5 - N C D

Series
EVO = Evolution Range

Camera
05 = 5 Megapixel Sensor

Format
N = Standard
(MJPEG/H.264)

Housing
C = Concealed

other available models:
I = Indoor (White)
J = Indoor (Black)
M = Outdoor (White)
N = Outdoor (Black)

Communications
D = RJ45 TCP/IP