Evolution
360° Indoor Camera

Taking the next step in 360° total situational awareness

ONCΛM
G R Λ N D E Y E

A 360° indoor 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
- Light weight enclosure

Whether wall or ceiling mount is required

- Fully supports IEEE802.3af Class 2 Power over Ethernet (PoE)
- Quick and easy installation
- Professional indoor enclosure
- 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 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
- 10fps 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

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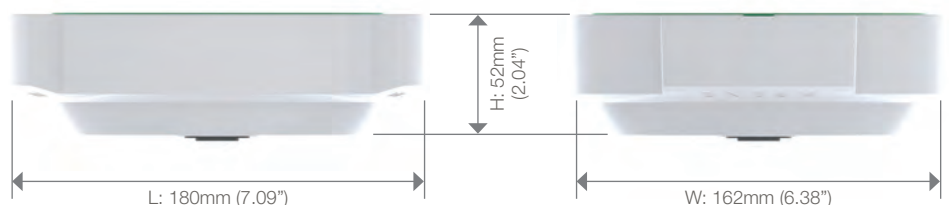
PELCO™

by Schneider Electric

International Standards
Organization Registered Firm;
ISO 9001 Quality System

ISO 9001 CERTIFIED

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Model	EVO-05NID (White enclosure)	EVO-05NJD (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 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 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 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	

H: 52mm (2.04")

L: 180mm (7.09")   W: 162mm (6.38")

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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 / pendant)
Weight	0.58kg (1.08lbs)
Enclosure	Metal back plate with polycarbonate dome bubble and cover trim enclosure

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	IP54-rated – Indoor use only

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 **

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

Ordering

E V O - 0 5 N I D

Series
EVO = Evolution Range

Camera
05 = 5 Megapixel Sensor

Format
N = Standard
(MJPEG/H.264)

Housing
C = Concealed
I = Internal (White)
J = Internal (Black)
M = External (White)
N = External (Black)

Communications
D = RJ45 TCP/IP

Evolution Accessories

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