

Evolution 05 and 12

360° Explosive Environment Cameras

The next step in 360° total situational awareness

5MP or 12MP sensor and no moving parts

5MP sensor

- Up to 30 fps video stream at 1 MP and ¼ MP
- 0.2 lux minimum illumination and electronic WDR

12MP high-resolution sensor

- Up to 30 fps at 2.0 MP
- 0.1 lux minimum illumination
- Constant 360° surveillance with no blind spots
- No moving parts and silent operation
- PoE, 12 VDC or mains powered models
- 3-years warranty



Advanced features

- Local SD card slot for event recording
- Configurable privacy regions
- Polygonal video motion detection regions
- Local alarm digital input and output
- Audio microphone input

Uniquely suited for extreme environments

- Robust 316L stainless steel construction
- Designed for demanding industrial environments
- ATEX approved for Gas Zone 1 and Zone 2
- ATEX approved for Dust Zone 21 and Zone 22
- IP66, IP67, IP68 rated
- Optional heater / fiber transceiver / integrated 115 VAC or 230 VAC PSU
- Range of accessories provide multiple mounting possibilities including wall, pole and ceiling

Applications

- Industrial and chemical plants
- Offshore and onshore environments
- Ports and marine applications
- Food and processing areas



Model

DEX12-EVO

Product Ordering Codes

EVO-05-EIP	EVO-12-EIP	Indoor
EVO-05-EOA	EVO-12-EOA	Outdoor
EVO-05-EOE	EVO-12-EOE	
EVO-05-ESA	EVO-12-ESA	Outdoor Extreme
EVO-05-ESE	EVO-12-ESE	
EVO-05-EMA	EVO-12-EMA	
EVO-05-EME	EVO-12-EME	

Extensive VMS/NVR platform integration with Oncam SDK

- Market leading Oncam 3D dewarping software
- Full Live and retrospective dewarping available
- Camera features are accessible through VMS platforms
- Simultaneous multiple video streams
- 10x digital zoom capability through client-side dewarping
- H.264 / MJPEG streaming with multiple quality levels
- Optimizes bandwidth and storage utilization
- Intuitive web-based interface for viewing and configuration
- Supported by major VMS / NVR systems
- ONVIF Profile S conformant

Evolution 05 and 12

360° Explosive Environment Cameras



The next step in 360° total situational awareness

General	EVO-05	EVO-12
Lens Field of View	180° Horizontal, 168° Vertical	180° Horizontal, 180° Vertical
Image Sensor	5 MP, 2592 H x 1944 V pixels and 1/2.5-inch CMOS Sensor	12.4 MP, 4072 H x 3046 V pixels and 1/2.3-inch Sony CMOS Sensor
Lens	185° / F2.0	
Minimum Illumination	0.2 lux = 50 IRE F/2.0	0.1 lux = 50 IRE F/2.0
Frame Rate	30 fps for 1 MP and ¼ MP resolution 15 fps for 2 MP resolution 10 fps for 4 MP full resolution	12 fps for maximum resolution
Video Motion Detection	8 configurable regions	
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 and local recording	
Networking	TCP/IP, HTTP, DHCP, DNS, NTP, FTP, SMTP and RSTP	
Privacy Regions	10 configurable privacy regions	
SD Card	Built-in SD card slot. Supports cards up to 128 GB capacity. Speed class 10 or higher required.	
Audio Connections	Audio In through 3.5 mm jack, RTSP using G711 codec or ONVIF S	
Audio Input Level	Mic input level range is approximately 5 mV to 50 mV	
Analog Video Out	Test port for production, not available in normal operation	
White Balance Range	Auto White Balance (Range = approximately 2500 K ~ 8000 K)	

Video		
Video Stream 1 Codec	H.264 High, Level 5 / MJPEG (streams configurable)	H.264 in 9.6 MP, 6 MP, 4 MP, 2 MP
Video Stream 1 Compression Level	Multi-levels of compression and frame rate adjustment	
Video Stream 1 Pixel Resolution	Fisheyes at: 4 MP (2144 x 1944), 2 MP (1488 x 1360), 1 MP (1056 x 960), ¼ MP (528 x 480)	Fisheyes at: 9.6 MP (3200 x 3000), 6 MP (2528 x 2376), 4 MP (2080 x 1960), 2 MP (1472 x 1384)
Video Stream 2 Codec	H.264 High, Level 5 / MJPEG (streams configurable)	H.264 in 4 MP, 2 MP, 1 MP and ¼ MP
Video Stream 2 Compression Level	Multi-levels of compression and frame rate adjustment	
Video Stream 2 Pixel Resolution	Fisheyes at: 4 MP (2144 x 1944), 2 MP (1488 x 1360), 1 MP (1056 x 960), ¼ MP (528 x 480)	Fisheyes at: ¼ MP (544 x 512)
Video Stream 3 Codec	MJPEG	MJPEG in 4 MP, 2 MP, 1 MP and ¼ MP
Video Stream 3 Compression Level	Multi-levels of compression and frame rate adjustment	
Video Stream 3 Pixel Resolution	Fisheye at: ¼ MP (528 x 480)	Fisheyes at: ¼ MP (544 x 512)
* VCam Stream 4, 5, 6, 7 Codec	N/A	H.264
* VCam Stream 4, 5, 6, 7 Compression Level	N/A	Multi-levels of compression and frame rate adjustment
* VCam Stream 4, 5, 6, 7 Pixel Resolution	N/A	4x independent onboard dewarped VCams at 1 MP (1280 x 720), ¼ MP (640 x 480)
Maximum Frame Rate	30 fps	
Image Control	Settings: brightness / contrast / saturation / exposure compensation, compression quality and wall / ceiling / table mount	
Image Enhancement	Electronic WDR 60dB	
PTZ Functionality	10x zoom with Oncam 3D client-side dewarping software	
VMS / NVR Support	Contact Oncam Sales for the supported VMS / NVR list	
Web Browser Compatibility	Internet Explorer 9, Edge 25, Firefox 23 and Chrome 29 or above. Plug-in required for full functionality	
Unicast	Up to 20 simultaneous users depending on the resolution settings	
Multicast	Supported for H.264 main camera stream	
Bit Rate Control	Options include Variable Bit Rate Controls, Constant Bit Rate Control and Constant Quality Control	Options include Constant Bit Rate Control and Constant Quality Control

* Video Stream 2 and VCams cannot be used simultaneously.

Evolution 05 and 12



360° Explosive Environment Cameras

The next step in 360° total situational awareness

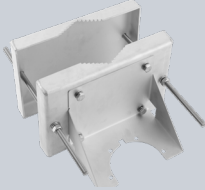

Electrical	Indoor	Outdoor		Outdoor Extreme			
	EVO-05-EIP	EVO-05-EOA	EVO-05-EOE	EVO-05-ESA	EVO-05-ESE	EVO-05-EMA	EVO-05-EME
	EVO-12-EIP	EVO-12-EOA	EVO-12-EOE	EVO-12-ESA	EVO-12-ESE	EVO-12-EMA	EVO-12-EME
Power Input Requirements (housing)	POE	115 VAC	230 VAC	115 VAC	230 VAC	115 VAC	230 VAC
Power Consumption	8 W	8 W + 15 W Heater		12 W + 15 W Heater			
Fiber Optic Converter Onboard	N/A		Single Mode		Multi-Mode		
Heater	N/A	15 W Thermostatically Controlled					
Power Input (camera module)	12 VDC, 1.0 A (min) LPS or NEC Class 2 power supply or Power over Ethernet (PoE), IEEE standard 802.3af						
Ports (camera module)	RJ45 for 100Base-TX 2.1 mm DC Input jack 6-pin 1.5 mm Phoenix for external I/O BNC for test video output						
EVO-05 Network Cable Type	CAT5 or better for 100Base-TX						
EVO-12 Network Cable Type	CAT5 or better for 1000Base-TX						
Mechanical							
Camera Mount	Surface mount (with appropriate accessory shown below)						
Weight	7 to 7.5 kg (15.5 to 16.5 lbs), model dependent						
Dimensions (L x W)	Length 253 mm x Ø158 mm (9.96 in. x Ø6.22 in.)						
Housing Material	Stainless Steel 316L						
Housing Entries	Two M20 entries and one M25 entry						
Environmental							
Operating Temperature Range	-20 to +55°C (-4 to +131°F)						
Ingress Protection	IP66, IP67, IP68						
Certifications							
Explosive Atmosphere Approvals	II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T80°C Db						
Certified Temperature Range	-20 to +55°C (-4 to +131°F)						
Other Approvals	CE, IP66/67/68						
Camera Module Approvals	IEEE802.3af, UL, CISPR Class A, FCC, ICES-003						

Evolution 05 and 12



360° Explosive Environment Cameras

The next step in 360° total situational awareness

Accessories		
	Part Number	Description
	OBE-07-ESA	Wall Mount Bracket Stainless Steel 316L Weight 0.8 kg (1.76 lb)
	OBE-08-ESA	Pole Mount Adaptor Ø 50 to 150 mm (1.97 to 5.9 in.) Stainless Steel 316L Weight 0.8 kg (1.76 lb) (Use with Wall Bracket)
	OBE-09-ESA	Ceiling Mount Bracket 230 mm high (9.1 in.) Stainless steel 316L Weight 4 kg (8.82 lb)
	OBE-10-ESA	ExD Installation Toolkit 1 Vice mount tool 1 Strap wrench tool
		

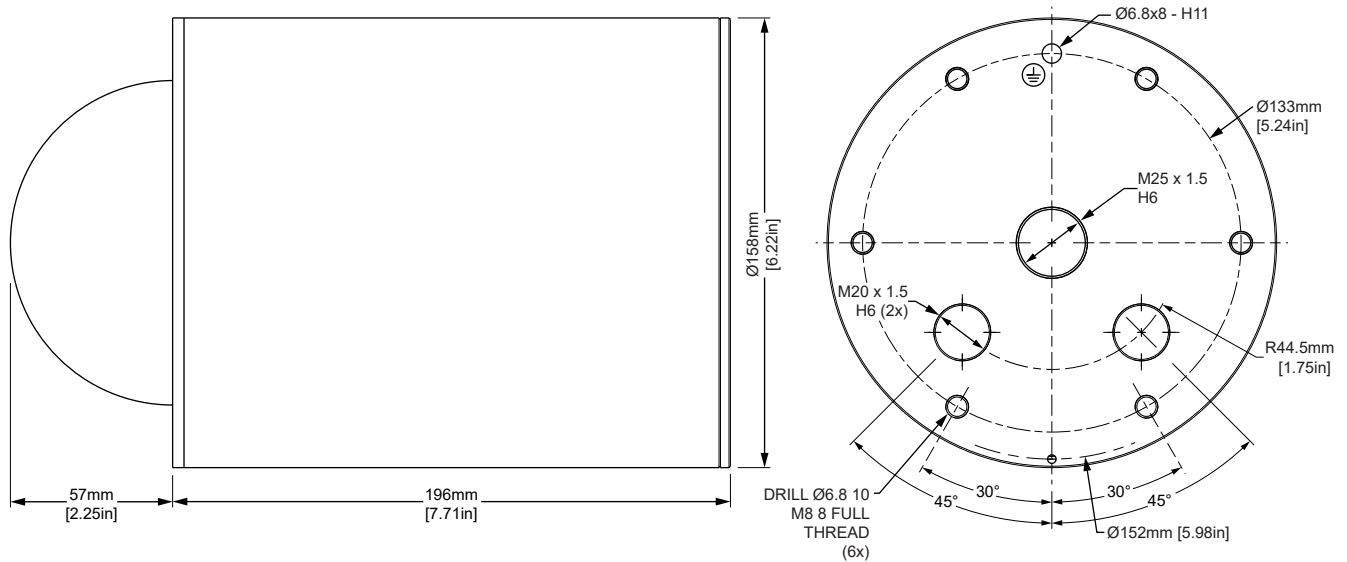
Evolution 05 and 12



360° Explosive Environment Cameras

The next step in 360° total situational awareness

Dimensions



©Copyright 2014 - 2017 Oncam Global Group AG. All rights reserved.

Oncam Grandeye is the trade name of Oncam Global Group AG. Specifications and configurations subject to change without notice.

EVO-05_12-ExD_Explosion-Proof-Camera-DataSheet_2018_10