

# OCULUS

## Rugged pan/tilt camera with HD or SD video options

The Oculus is a compact, rugged, continuous rotation PTZ camera that has been specifically designed for harsh and challenging environments. Utilizing the latest SD and HD camera modules, the Oculus can provide analogue, HD-SDI as well as IP video outputs.

As with all Oculus units, everything is fully housed within a hard anodised aluminium casing, fully rated to IP67, and ready to handle the harshest of environments. The toughened, optically correct glass provides clear images and can be kept clean at all times by the compact wiper. Optical encoders for both the pan and tilt axis provide highly accurate positioning and repeatability, allied with self-correction systems that will counteract any external interference with the moving head.

The Oculus can be mounted upright or inverted, and the yoke can be offset to eliminate blind spots through a full 360 degrees of rotation. Mounting accessories are available to suit standard mounting platforms, including 4" PCD.

### Key features:

- SD video with 10x, 18x, 28x, 36x and 40x optical zoom options
- HD video with 20x and 30x optical zoom options
- Ruggedised for extreme environments
- Day/night operation
- Optical encoders for accurate positioning and repeatability
- Optional heater for reliable operation down to -40°C
- Flat, toughened glass window
- Protected to IP67 (IP68 option)
- 316L stainless steel option
- Built-in camera lens wiper
- Presets, tours and privacy masking
- Multiple control protocols



### The Silent Sentinel Range

Silent Sentinel offer an extensive range of camera and lens configurations to meet your exact surveillance requirements.

Contact customer service for more information on our full range of products and bespoke design and build services.

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OCULUS



AERON



OSIRIS



JAEGAR

# OCULUS

## Oculus low light

Type	SD (Low light)	SD (Low light)	SD	SD	SD	SD
Optical zoom	10x	18x	18x	28x	36x	40x
Digital enlargement	12x (120x combined)	12x (432x combined)	12x (216x combined)	12x (336x combined)	12x (432x combined)	12x (480x combined)
Image sensor	1/3" Super HAD CCD II	1/3" Exview CCD	1/4" Exview CCD	1/4" Exview CCD	1/4" Exview CCD	1/4" Super HAD CCD II
Resolution	530TVL	530TVL	530TVL	550TVL	530TVL	670TVL
Signal system	PAL	PAL	PAL	PAL	PAL	PAL
Lens (wide to tele)	F=5.1mm to 51mm F1.8 to F2.1	F=4.7mm to 84mm F1.6	F=4.1mm to 73.8mm F1.4 to F3.0	F=3.5mm to 98.0mm F1.35 to F3.7	F=3.4mm to 122.4mm F1.6 to F4.5	F=3.06mm to 122.4mm F1.6 to F4.6
Angle of view - horizontal	50° (W) to 5.4° (T)	54.4° (W) to 3.1° (T)	48° (W) to 2.8° (T)	55.8° (W) to 2.1° (T)	58° (W) to 1.7° (T)	60° (W) to 1.6° (T)
Minimum illumination (50IRE)	Day mode (colour): 0.25 lux typical Night mode (mono): 0.0004 lux typical	Day mode (colour): 0.25 lux typical Night mode (mono): 0.0025 lux typical	Day mode (colour): 0.7 lux typical Night mode (mono): 0.01 lux typical	Day mode (colour): 0.65 lux typical Night mode (mono): 0.005 lux typical	Day mode (colour): 1.4 lux typical Night mode (mono): 0.01 lux typical	Day mode (colour): 0.6 lux typical Night mode (mono): 0.01 lux typical
Video output	VBS: 1.0 Vp-p (sync negative)	Composite	VBS: 1.0 Vp-p (sync negative)	VBS: 1.0 Vp-p (sync negative)	VBS: 1.0 Vp-p (sync negative)	Composite

## Oculus HD video range

Video cameras	HD	HD
Optical zoom	20x	30x
Digital enlargement	N/A	12x (360x with optical zoom)
Image sensors	1/2.8" Type (1/3") CMOS	1/2.8" type Exmor CMOS sensor
Resolution	2096x1097 (2.3M)	Approx 3.27 million
Signal system	HD 1080p	HD: 1080p/SD: NTSC/PAL
Lens (wide to tele)	F=4.7mm to 94mm F1.6	f=4.3mm to 129.0mm, F1.6 to F4.7
Angle of view - horizontal	55.2° (W) to -2.9° (T)	54.1° (W) to 2.9° (T)
Minimum illumination (50IRE)	1.6lux, 0.04 lux in high sens mode	1.7 lux, 0.5 lux in high sens mode
Video output	Digital/IP	HD-SDI

## Mechanical specifications

Construction	Die-cast hard anodised, powder coated aluminium with A4 stainless fittings	
Turning diameter	Normal 220mm / 8.66"	Offset 370mm / 14.57"
Height	370mm / 14.57"	340mm / 13.38"
Height with adaptor	500mm / 19.68"	470mm / 18.50"
Pan rotation limit / speed	360° continuous / 180° per second (excluding ramping)	
Tilt rotation limit / speed	+90° to -30° upright (-68° inclined) +30° to -90° inverted 180° per second (excluding ramping)	
Weight (with adaptor)	7Kg (8Kg) 15.43lb (17.63lb)	
Mounting profile	Upright / Inverted / Offset	
Pan/tilt bearings	Sealed for life - no maintenance required	
Motor drive	Long life toothed polypropylene belt drive. Pulleys bonded to keypad shafts for minimum backlash	
Environmental rating	IP67	
Operating temperature range (ambient, dry)	-20°C to +60°C (-40°F to +60°C with optional heater) -4°F to +150°F (-40°F to +150°F with optional heater)	
Mounting	4" PCD mount	
Connection socket	IP67 Neptune multi-way SD, IP67 Marine HD-SDI option and IP67 IP option	

## Ordering information

Product code	Product description
RC3-50PH10XB	Oculus Rugged Dome 10:1 Low light with Wiper, Black
RC3-50PYF18XB	Oculus Rugged Dome 18:1 with Wiper, Black
RC3-50PHA18XB	Oculus Rugged Dome 18:1 Low light with Wiper, Black
RC3-50PYB28XB	Oculus Rugged Dome 28:1 with Wiper, Black
RC3-50PYD36XB	Oculus Rugged Dome 36:1 with Wiper, Black
RC3-50YJ30XB	Oculus Rugged Dome HD IP 30:1 with Wiper, Black
RC3-50HYJ30XB	Oculus Rugged Dome HD HD-SDI 30:1 with Wiper, Black

Note: Also available in White and Stainless steel. Change 'B' at the end of the product code to 'W' or 'SS'



Designed and manufactured in the UK.

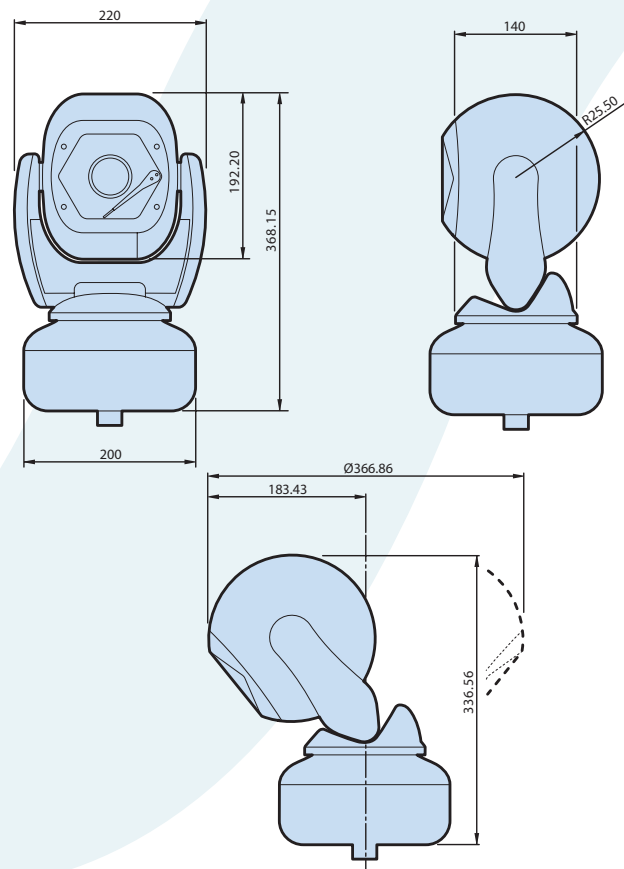
Specifications may be subject to change without notice • DN220714 - 1.1c • © 2014

## Oculus standard video

## Electrical, electronic and software specifications

Optical encoder preset accuracy	0.01°
Rotational contacts	Heavy duty slip rings for power, data, video, switching for washer
Position control	"Capable of retaining position without drift, Automatic position recovery if forced away by a "non-control" intervention"
Roll around mode	Auto 180° pan spin when tilt reaches end of travel while following subjects
Configuration	Via on screen menus
Presets	127 + wash preset (repeatability 0.05°)
Tours	16 preset tours (maximum of 60 positions each), four 8 minute mimic tours
Privacy zones	Maximum of eight on-screen simultaneously (Sony models)
Communications	Coaxial or RS485 half duplex data comms with absolute positioning output
Supported protocols	Pelco-D, Pelco-P, CBC, OCP485, Forward vision mic1 FV300, Philips, Vicon.
Power requirements	"At Oculus unit: 14 to 36VDC or 14 to 24VAC, 45W peak (100W with optional heater) Supplied PSU requires 230VAC, 12VDC support on some models"
Additional details	In-built real-time clock

## Dimensions (in millimeters)



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