

## OCULUS LL

### Ultra low light video

The Oculus LL is a compact, rugged, continuous rotation PTZ camera that has been specifically designed to provide crisp clear images even in very low light conditions.

Camera options of 10x or 18x zoom available with the ability to work down to 0.25lux whilst still producing colour, low noise high resolution images without the need for additional illumination. Of course for zero light conditions the Oculus LL can be supplied with built-in IR or White LED illuminators.

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 LL 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.

The Oculus LL is available with a range of HD and SD day/night zoom camera modules to suit your installation. The Oculus LL is supplied with SD low light modules.

### Key features:

- SD video with low light 10x and 18x optical zoom options
- Produces clear colour images down to 0.25lux (F1.6, 50IRE)
- 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



Traditional 1/4" CCD camera



Low light 1/3" CCD \*

### 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 low light video

Type	SD (Low light)	SD (Low light)*
Optical zoom	10x	18x
Digital enlargement	12x (120x combined)	12x (432x combined)
Image sensor	1/3" Super HAD CCD II	1/3" Exview CCD
Resolution	530TVL	530TVL
Signal system	PAL	PAL
Lens (wide to tele)	F=5.1mm to 51mm F1.8 to F2.1	F=4.7mm to 84mm F1.6
Angle of view - horizontal	50° (W) to 5.4° (T)	54.4° (W) to 3.1° (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
Video output	VBS: 1.0 Vp-p (sync negative)	Composite

## 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 26VAC, 45W peak (100W with optional heater) Supplied PSU requires 230VAC. 12VDC support on some models"
Additional details	In-built real-time clock

## Mechanical specifications

Construction	Die-cast hard anodised, powder coated aluminium with A4 stainless fittings	
Turning diameter Height Height with adaptor	Normal	Offset
	220mm / 8.66"	370mm / 14.57"
	370mm / 14.57"	340mm / 13.38"
	500mm / 19.68"	470mm / 18.50"
Pan rotation limit / speed Tilt rotation limit / speed	360° continuous / 180° per second (excluding ramping) +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°C 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-SOPYA10XB	Oculus Rugged Dome 10:1 Low light with Wiper, Black
RC3-SOPHA18XB	Oculus Rugged Dome 18:1 Low light with Wiper, Black

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



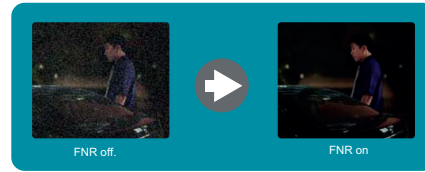
Designed and manufactured in the UK.

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

\* The illustrations below refer to the 18x core

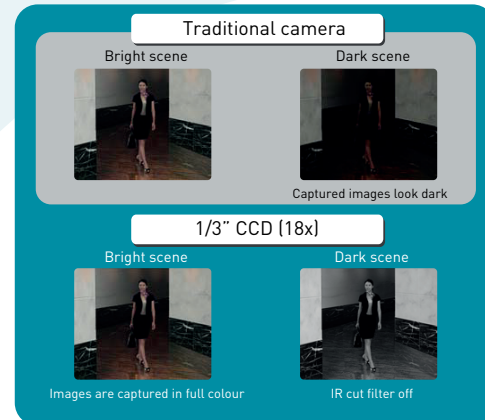
## Frame noise reduction

FNR is the particular function of Hitachi's new DSP. The function does not lose brightness and contrast in low light conditions.



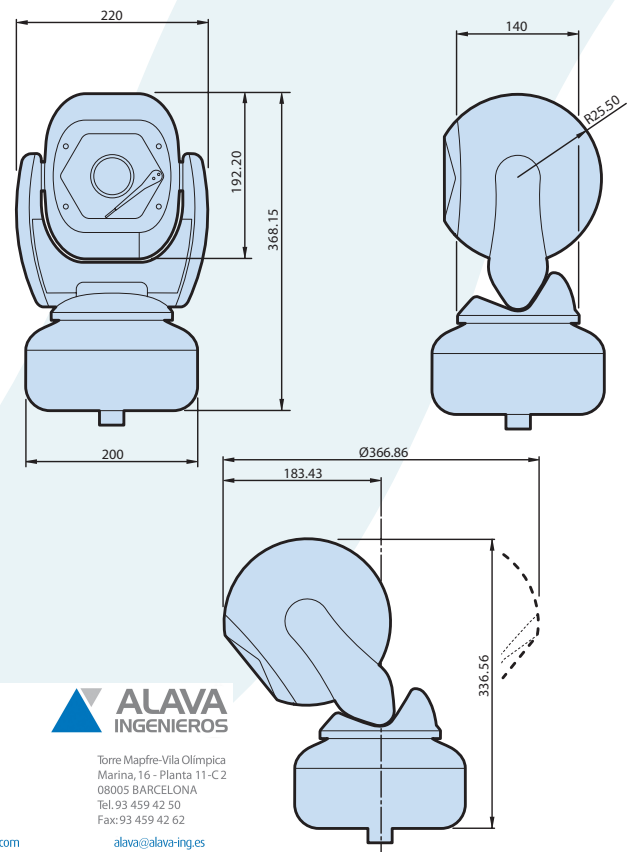
## Removable IR cut filter

In daylight conditions, the IR cut filter ensures clear, high-quality color images. At night or in other very low light situations, the IR cut filter is automatically removed to allow capture of bright, high-contrast black and white images.



The degree of removable IR cut filter's effectiveness varies with the type and intensity of the light source.

## Dimensions (in millimeters)



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