

Professional Low Light Cameras – Series *LunaVision*

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Description

The Series *LunaVision* consists of 1/2" and 1/3" professional Low Light Colour or Monochrome cameras.

To obtain the extreme Low Light Performance, these cameras are based on Sony ExView HAD CCD-sensors, Premium Grade Quality, from which only the very best are hand-picked for the *LunaVision* cameras.

To further improve the signal/noise ratio, and thereby the low-light performance, the sensor is Air-Cooled by a Twin-Fan system, and special low-noise video amplifiers have been used.



LunaVision

The cameras are very robust and have been shock and vibration tested.

Main Features

- Genuine Low Light Cameras – even without integration!
- 1/2" and 1/3" Colour Version
- 540 Lines Colour / 570 Lines Monochrome
- Colour versions may be switched into B/W mode for improved resolution
- CCDs are hand-selected from Sony Premium Grade Exview HAD CCDs
- Twin-Fan Air-Cooled CCD for improved sensitivity
- Perfect alignment of CCD sensor in optical axis
- On Screen Display
- DSP based

Device Structure

- Interline CCD image sensor
- Optical size: Diagonal 8mm (Type 1/2)
- Number of effective pixels: 752 (H) · 582 (V) approx. 440K pixels
- Total number of pixels: 795 (H) · 596 (V) approx. 470K pixels
- Chip size: 7.40mm (H) · 5.95mm (V)
- Unit cell size: 8.6µm (H) · 8.3µm (V)
- Optical black: Horizontal (H) direction: Front 3 pixels, rear 40 pixels
Vertical (V) direction: Front 12 pixels, rear 2 pixels
- Number of dummy bits: Horizontal 22
Vertical 1 (even fields only)
- Substrate material: Silicon

Specifications

Type	HO-S 321 Twin	HO-S 331 Twin	HO-S 221	HO-S 231
Type	1/2" Colour	1/3" Colour	1/2" B/W	1/3" B/W
Video output	1 Vpp, 75 Ω, PAL/NTSC			
Horizontal resolution	540 TV-lines Colour / Monochrome		570 TV-lines	
Sensitivity at CCD, AGC max, 30 IRE, no integration	0.0006 lux	0.005 lux	0.0003 lux	0.0008 lux
Sensitivity with F1.4 lens, AGC max, 30 IRE, no integration	0.006 lux	0.05 lux	0.003 lux	0.008 lux
S/N Ratio, AGC Off	>50 dB			
Integration	OFF / 2f / 4f / 8f / 16f / 32f / 64 field		OFF / 2f / 4f	
Electronic shutter	1/50 (NTSC:1/60)-1/10000 (8 steps + CCD iris)			
Video synchronisation	Internal/External			
Gain	Fixed/Auto max 12 dB/Auto max 24 dB			
BLC – Backlight Compensation	ON (multiple modes)/OFF			
White Balance	Auto/Manual		N/A	
Power supply				
Voltage	12 VDC +/- 10%			
Power consumption	3 W typ.			
Physical Characteristics				
Housing	All aluminium			
Size	120 x 76 x 56 mm			
Weight	Approx. 480 g			
Environment				
Operating temperature	-10 to +55°C, max. 95% RH non-condensing			
Vibration test	IEC 68-2-6			
Shock test	60 G in 3 dimensions, repeated 3 times			
Bump test	10 G in 3 dimensions, repeated 100 times			

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THE ONE TO WATCH

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