

# A & E Specifications



## VEC402HC

### 1. Description

1/3" SuperHAD Colour CCD camera with 540TVL resolution, digital signal processing and 0.3 Lux Colour and 0.002 Lux using sense up low light sensitivity.

### 2. System Performance

- 2.1. The High Resolution Colour DSP Camera shall include, as a minimum, the following features / functions / specifications:
- 2.2. The High Resolution Sony DSP Colour Camera must be protected by the most extensive support services in the industry, including Customer Service, Pre-Sales Applications Assistance, After-Sales Technical Assistance and access to Technical Online Support.
- 2.3. The High Resolution DSP Colour Camera and its components shall be thoroughly tested prior to being shipped from the manufacturer's facility.
- 2.4. The High Resolution DSP Colour Camera shall incorporate a 1/3-inch, digital signal processing (DSP) and a minimum of 540 TV lines of resolution utilizing an effective pixel count of no less than 795 (H) x 596 (V) PAL.
- 2.5. The High Resolution DSP Colour Camera shall provide excellent Colour performance in low light, down to 0.3 Lux @ f1.2 (50IRE) and 0.002 Lux using Sense up.
- 2.6. The High Resolution DSP Colour Camera shall have an internal amplifier that applies gain to the signal from the DPS video imaging system. The amplifier must operate when there is insufficient light in the scene to produce an acceptable video output level and must only apply as much gain as is necessary. The camera shall incorporate four levels of automatic gain compensation (AGC), on, off, middle and high allowing the user to achieve the optimal balance of noise and low light performance in demanding environments.
- 2.7. The High Resolution DSP Colour Camera shall support the ability to reduce the shutter speed to x2 ~ x 128, this will increase the amount of light falling on the CCD before the image is sent and so give the appearance of a brighter image.
- 2.8. The High Resolution DSP Colour Camera shall support the use of Auto Iris / Video Drive lenses connected to the camera via an industry standard 4-pin socket located on the side of the camera. The camera must provide power and the video drive signal to the lens.

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- 2.9. The High Resolution DSP Colour Camera shall support the use of Auto Iris / Direct Drive lenses connected to the camera via an industry standard 4-pin socket located on the side of the camera. The camera must provide power to the lens. The camera must also include an Automatic Iris Setting (AIS) through the On-screen Display Menu to adjust the gain (level) of direct drive lenses.
- 2.10. The High Resolution DSP Colour Camera shall include a 12V DC - 24V AC power supply. The camera must have the ability to synchronize the video output to the AC power input so that all cameras on the system may be synchronized to the same point on the AC supply. In order to synchronize cameras on different phases, a phase adjustment control shall be provided through the On-screen Display Menu. The phase shall be adjustable from 0 to 360 degrees. The camera must also include internal synchronization capabilities.
- 2.11. The power consumption of the High Resolution DSP Colour Camera shall be no more than 4.0 watts and a LED must be present on the rear of the camera to indicate when powered is on to the camera.
- 2.12. The High Resolution DSP Colour Camera shall have a signal to noise ratio of 50 dB with the AGC off.
- 2.13. The High Resolution DSP Colour Camera shall have four privacy zone masks. Each zone is fully configurable and independent of each other.
- 2.14. The High Resolution DSP Colour Camera shall have four motion detection zones. Each zone is fully configurable and independent of each other.
- 2.15. The High Resolution DSP Colour Camera shall have the ability to mirror the image, selectable in the on-screen menu.
- 2.16. The High Resolution DSP Colour Camera shall have be able to enhance the edges of the image by selecting the sharpness levels 0 ~31.
- 2.17. The High Resolution DSP Colour Camera shall be able to improve the recording duration of a digital video recorder (DVR) by the use of dynamic noise reduction (DNR), which has four levels off, low, middle and high this is set in the on-screen menu.
- 2.18. The High Resolution DSP Colour Camera shall incorporate auto-tracking white balance range of between 2500°K and 9500°K to constantly monitor the light and adjust its Colour accordingly. The automatic white balance ranges shall be selectable using the On-screen Display Menu. In addition to the automatic tracking settings, there is a Manual white balance setting to allow the setting of the operating colour temperature in the range.

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- 2.19. The High Resolution DSP Colour Camera shall have the ability to provide a Camera ID of up to 22 digits.
- 2.20. The High Resolution DSP Colour Camera shall have four levels of adjustment for the Back Light Compensation window, off, low, middle and high.
- 2.21. The High Resolution DSP Colour Camera shall include a back-focus adjustment mechanism to allow easy installation and adjustments.
- 2.22. The High Resolution DSP Colour Camera shall be the Vista VEC402HC or equivalent.

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## 3. Mechanical Specifications

3.1. The High Resolution DSP Colour Camera must have the following mechanical specifications:

1. Unit Dimensions (L x W x H).... 120 x 66 x 56mm
2. Unit Weight.....250 g
3. Video Output..... Composite Video
4. Auto Iris Output .....4-pin standard socket
5. Lens Mount .....C/CS
6. Mounting Hole ..... 1/4"-20 UNC top and bottom

## 4. Electrical Requirements

4.1. The High Resolution DSP Colour Camera must have the following electrical specifications:

1. Voltage..... 12V DC- 24V AC
2. Power Consumption..... <4.0 watts
3. Power Indicator..... LED

## 5. Environmental Conditions

5.1. The High Resolution DSP Colour Camera shall be designed to meet the following environmental conditions:

1. Operating Temperature ..... -10° to 50° C
2. Emissions ..... FCC: Part 15, Class A  
CE: EN55022
3. Immunity..... IEC 801 Parts 2, 3, and 4
4. Safety ..... CE: EN60065

The camera shall be a Vista **VEC402HC**