## DINION AN 4000



DINION 4000 cameras are compact analog cameras that offer excellent resolution in variable lighting conditions, day or night. The high performance 960H $1 / 3$-inch CCD sensor provides a resolution of 720TVL. The cameras are an ideal solution for demanding scene conditions. The backlight compensation and highlight compensation features optimize the image visibility in high-contrast areas, automatically compensating for bright backgrounds and strong light sources.
The cameras are easy to install and parameters can be set individually. Privacy zones and motion detection functions can be set up in the handy camera menu system.
The true day/night version automatically switches from color to monochrome using a mechanical IR filter depending on the available light.

## System overview

The camera is supplied ready to operate - simply attach the lens, connect video and then power. For especially challenging situations where fine tuning or special settings are required, the camera parameters can be individually set using the control buttons on the side of the camera and an On-Screen Display (OSD).


- Ultra high resolution 960 H (1/3") sensor
- Digital extended dynamic range
- Digital noise reduction
- Easy to install
- True day/night version


## Functions

## Day/Night mode

The true day/night version provides enhanced night viewing. The mechanical IR filter can switch from color to monochrome automatically by either sensing the illumination level or via the alarm input. The filter can be switched manually via the alarm input or through the camera.

## Ideal picture performance

There are many settings available to help fine-tune the picture performance to match your installation environment. These include:

- BLC - automatically and dynamically compensates for strong backlight
- HLC - reduces glare from highlight areas
- Digital dynamic range - extends dynamic range of visible areas
- Contrast and sharpness - enhance details in bright or misty scenes
- Dynamic noise reduction - dynamically reduces noise in the picture


## Privacy masking

Eight different privacy zones allow specific parts of a scene to be blocked. Pre-program any part of the scene to be masked.

## Video Motion Detection

The built-in video motion detector allows you to select four programmable areas with sensitivity thresholds. When motion is detected, alarms can be displayed in the video signal (the true day/night version can close the output relay).

## Typical applications:

- Museums and art galleries
- Shopping centers
- Offices
- Schools, colleges and universities
- Petrol/gas stations


## Certifications and approvals

## Standards

| Safety (low voltage versions) | EN 60950-1 <br> UL 60950-1 (2 ${ }^{\text {nd }}$ edition) <br> CSA C22.2 No. 60950-1-07 (2 ${ }^{\text {nd }}$ edition) |
| :---: | :---: |
| Safety (high voltage versions) | EN 60950-1 |
|  | C-Tick |
| Emission | EN 55022 class B, FCC part 15 class B, EN61000-3-2, EN61000-3-3 |
| Immunity | EN 50130-4, EN 50121-4 |
| Vibration | Camera with $500 \mathrm{~g}(1.1 \mathrm{lbs})$ lens according to IEC 60068-2-6 |
| Region | Certification |
| Europe | CE |
|  | CE High Voltage |
| USA | UL |
|  | FCC |
| Canada | CSA |

Technical specifications

| Image Sensor | 960H, 1/3" CCD, sensor resolution 720TVL |
| :---: | :---: |
| System | PAL or NTSC |
| Total pixels ( $\mathrm{H} \times \mathrm{V}$ ) | $\begin{aligned} & 1020 \times 596 \text { (PAL) } \\ & 1020 \times 508 \text { (NTSC) } \end{aligned}$ |
| Effective pixels ( HxV ) | $\begin{aligned} & 976 \times 582 \text { (PAL) } \\ & 976 \times 494 \text { (NTSC) } \end{aligned}$ |
| Video Output | Composite: $1 \mathrm{Vpp}, 75 \mathrm{Ohm}$ |
| Sync. System | 12 VDC: Internal sync.; <br> 24 VAC: Line-lock |
| S/N Ratio (sharpness, AGC off) | 52 dB min. |
| Minimum Illumination (F1.2, 50IRE) | Color: 0.1 lx <br> B/W: 0.02 Ix (true D/N version) |


| Minimum Illumination (F1.2, 30IRE) | Color: 0.05 lx <br> $\mathrm{B} / \mathrm{W}: 0.01 \mathrm{~lx}$ (true $\mathrm{D} / \mathrm{N}$ version) |
| :---: | :---: |
| Manual shutter | $\begin{aligned} & 1 / 50-1 / 10,000 \text { (PAL) } \\ & 1 / 60-1 / 10,000 \text { (NTSC) } \end{aligned}$ |
| Digital Noise reduction | 2DNR |
| White Balance | ATW, Push, User1, User2, Anti CR, Manual, Push lock |
| Light compensation | OFF/BLC/HLC |
| Digital Dynamic Engine | On, Off |
| AGC | On, Off |
| Day/Night | Auto, Color, B/W |
| Burst | On, Off |
| Motion detection | 4 programmable zones |
| Privacy | 8 programmable zones (4 zones when motion detection is on) |
| Mirror | On (horizontal), Off |
| Sharpness | 0-255 |
| Alarm input (true D/N version only) | Night mode active profile switching, 3.3 V nominal, +40 VDC max. |
| Alarm output (true D/N version only) | Night mode active, 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA |
| OSD language | English, Japanese, German, French, Russian, Portuguese, Spanish, Simplified Chinese |
| Lens type | Manual, DC Iris DC Iris drive: 50 mA max. |
| Lens mount | CS (max. lens protrusion 5 mm [0.2 in]) <br> C-mount compatible with optional adapter ring |
| Tripod mount | Bottom (isolated) and top 1/4inch 20 UNC |
| Supply Voltage <br> (VBx-4075-C11, VBx-4075-C21) | $12 \mathrm{VDC} / 24 \mathrm{VAC}$ |
| Supply Voltage (VBx-4075-C51) | 230 VAC |
| Power Consumption (true D/N version) | 3.6 W max. / 0.3 A |
| Power Consumption (electronic D/N version) | 2.4 W max. / 0.2 A |
| Dimensions (without lens) | $\begin{aligned} & 58 \times 66 \times 122 \mathrm{~mm} \\ & 2.28 \times 2.6 \times 4.8 \mathrm{in} \end{aligned}$ |
| Weight (12 VDC/24 VAC) | $500 \mathrm{~g}(1.10 \mathrm{lbs})$ without lens |
| Weight (230 VAC) | $600 \mathrm{~g}(1.32 \mathrm{lbs})$ without lens |


| Operating Temperature | $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ |
| :--- | :--- |
|  | $\left(-4{ }^{\circ} \mathrm{F}\right.$ to $\left.+1311^{\circ} \mathrm{F}\right)$ |
| Operating Humidity | $20 \%$ to $90 \% \mathrm{RH}$ |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
|  | $\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+158{ }^{\circ} \mathrm{F}\right)$ |
| Storage Humidity | up to $98 \% \mathrm{RH}$ |

## Ordering information

## DINION AN 4000

960H analog indoor box camera. True day/night; DWDR; 720 TVL; 3-axis adjustment; 4-zone motion detect; 8-zone privacy mask; 12VDC/24VAC; PAL Order number VBN-4075-C11

## DINION AN 4000

960 H analog indoor box camera. True day/night; DWDR; 720 TVL; 3-axis adjustment; 4-zone motion detect; 8-zone privacy mask; 12VDC/24VAC; NTSC Order number VBN-4075-C21

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960 H analog indoor box camera. True day/night; DWDR; 720 TVL; 3-axis adjustment; 4-zone motion detect; 8-zone privacy mask; 230VAC; PAL Order number VBN-4075-C51

## DINION AN 4000

960H analog indoor box camera. Electronic day/night; DWDR; 720 TVL; 3-axis adjustment; 4-zone motion detect; 8-zone privacy mask; 12VDC/24VAC; PAL Order number VBC-4075-C11

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## Accessories

## LVF-4000C-D0550 Varifocal Lens

960 H varifocal IR-corrected lens. 1/3" sensor; CSmount; 4-pin DC-iris; F1.4-360; 5 to 50 mm Order number LVF-4000C-D0550

## LVF-4000C-D2812 Varifocal Lens

960 H varifocal IR-corrected lens. 1/3" sensor; CSmount; 4-pin DC-iris; F1.3-360; 2.8 to 12 mm
Order number LVF-4000C-D2812

## UPA-2430-60 Power Supply

Power supply for camera. 120 VAC, 60 Hz; 24 VAC, 30 VA Out
Order number UPA-2430-60

## UPA-2420-50 Power Supply

Power supply for cameras. 220 VAC, 50 Hz In; 24 VAC, 20 VA Out
Order number UPA-2420-50

## S1374 Adapter

Adapter to convert C mount lens to CS mount camera Order number S1374

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