Specifications

**Camera**

- **Model Number(Signal Format):** VK-S655N (NTSC), VK-S655EN (PAL)
- **Effective Pixels:** 380k (768 x 494), 410k (811 x 508)
- **Image Size:** (3.4-119mm) (w) / (3.3-119mm) (t)
- **Lens:** 36x optical zoom lens with 12x digital zoom
- **Image Stabilizer:** YES
- **Wide Dynamic Range:** YES w/o WDR
- **Electronic Image Stabilization:** YES
- **Progressive Scan:** YES
- **CCD Image Sensor:** VK-S655N (NTSC), VK-S655EN (PAL)
- **Operational Temp.:** -10°C~60°C
- **Provider:** Hitachi, Ltd.

**Power**

- **Consumption Max.(@9V):** Forcus/Zoom Motors active
- **Consumption (@9V):** all motors inactive
- **Supplied Current Max.(@9V):**
- **Supplied Current (@9V):**
- **Supplied Voltage:**

**Sync System**

- **IR-cut OFF (1/4s)(NTSC)/(1/3s)(PAL):**
- **IR-cut ON (1/4s)(NTSC)/(1/3s)(PAL):**
- **IR-cut ON (1/60s)(NTSC)/(1/50s)(PAL):**

**Sensitivity**

- **Min. Sensitivity (Typ.):** typ.540 min.520 TVL
- **Luminance S/N Ratio:** More than 50 dB

**Iris**

- **Manual (Sensitivity):** YES (area assignable)
- **Auto*/Manual:** OFF*/ON
- **Electrical Shutter:** OFF*/ON (max. 12X)

**Zoom/Focus/Iris**

- **Zoom Magnification:** 36x optical zoom lens with 12x digital zoom
- **Zoom Speed (Manual):** 1x* - 254x
- **F-value:** F1.4(w) - F4.2(t)
- **Practical H.angle:** (3.4-119mm) 36 (w) / 35 (t)
- **Electronic Shutter:** Pro. AE  (1/50 - 1/4ks)
- **Electrical Shutter:** Pro. AE (1/60 - 1/4ks)
- **Pro. AE+*(1/2-1/4*-1/4ks:Seamless):**
- **Pro. AER+* (OFF - ON - 1/4* - 1/4k):**

**I.R. Cut Filter**

- **Removable:** OFF*/ON* [2 zone 2-D(2/1 screen)*/8 zone 3-D(4/1 screen)]
- **Focal Range (Setting):** Manual (Far/Near) Auto
- **Focus:** (In Preset : Trace / No-)

**Electrical Interface**

- **Serial Interface:**
- **RS232C:**
  - Command Protocol: EAP(Echo control based on Address Protocol)/AFP
  - Method : speed
  - RS-232C logic voltage level

**Other Functions**

- **Signal Format:** VBS:1.0Vp-p, Y/C Output
- **Gain:** AGC priority 0 - 30 dB
- **Gain:** Exposure priority  F1.4 - F32
- **Gain:** Iris priority 0.1 lx
- **Gain:** Shutter priority 1/0.75-1/30ks
- **Gain:** F-value 2.8 - 2.2
- **Gain:** Zoom Speed (Manual): 4.6s*/6.6s
- **Gain:** Optical Zoom Magnification
- **Gain:** White Balance
- **Gain:** BLC (in WDR OFF mode)
- **Gain:** Image Stabilizer
- **Gain:** Electronic Shutter
- **Gain:** Internal/External (50Hz)
- **Gain:** External/Internal (60Hz)
- **Gain:** Input Voltage (REC656)
- **Gain:** Digital Slow Shutter
- **Gain:** RS232C logic voltage level

**Memory**

- **Test Data:** Provided
- **Design and Specifications are subject to change without notice.
- **The expanded image and comparison photos in this catalog are simulations.**

**Specifications are subject to change without notice.**
High-performance digital surveillance camera with 36x optical zoom

Advanced digital signal processing (DSP) technology ensures outstanding color reproduction and low light performance, capable of capturing details such as facial features, clothing, and automobile colors that can serve as vital evidence. Setting a new standard for imaging quality, night or day, the Hitachi VK-S655N/EN marks another phase in the evolution of high-quality digital surveillance systems.

36x optical zoom lens with 12x digital zoom

A newly designed 36x auto-focus optical zoom lens delivers enhanced resolution, clearly capturing subject details at a distance. Proprietary Hitachi auto-focus control makes it possible to track rapidly moving subjects, while the addition of a 12x digital zoom delivers a maximum zoom factor of 432x. The improved lens design produces crisp clear details, even in peripheral areas of the image.

Sharp Image Details with Accurate Colors

One extremely important requirement in the surveillance and crime prevention fields is the reproducibility of actual colors. The Hitachi VK-S655N/EN recreates the actual color to the fullest extent possible not just in well-lit areas, but in darker ones, allowing more accurate depiction of the surveillance area.

Technology for low-light performance

High-performance CCD teams with digital signal processing to achieve outstanding low-light performance, capable of capturing images in standard mode at a minimum subject illumination of 1.0 lx.

Frame noise reduction

Hitachi’s frame noise reduction minimizes random noise and after-images often associated with moving subjects, making this high-performance unit suited to a variety of surveillance scenarios. Producing clear, sharp images even in challenging low-light conditions, this technology also facilitates image compression in network camera systems.

Digital slow shutter

Digital processing boosts sensitivity to a maximum of 1/1-second (VK-S655N) or 1/0.75-second (VK-S655EN) exposure time, making it possible to capture bright, clear images in a variety of lighting situations.

Digital output provides simpler design, cleaner signal to encoder

The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Zoom chassis camera incorporated in network camera

Digital output ensures transmission of high-quality, low-noise images. The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Wide dynamic range

When a surveillance scene includes bright and dark areas, alternate images are captured at optimum exposure for both levels of illumination, and the resulting two fields are combined into a single frame. This produces clear, glare-free images in a variety of lighting conditions, such as entrances with varying levels of indoor/outdoor illumination and situations where backlighting can make it difficult to identify facial features.

Progressive scanning

Conventional surveillance camera systems using interlaced scanning are not capable of producing clearly identifiable images of moving cars or people. The interface method uses two scans to create a single image frame, producing jumpy, poorly defined images when still images are captured from the video feed. Progressive scanning incorporated in the Hitachi VK-S655N/EN records the frame in a single sequential scan, creating sharp, high resolution still images, with clearly defined lines and contours.

Electronic image stabilization

Based on Hitachi’s track record of pioneering image stabilization technology, electronic image stabilization compensates for vibration or movement of the camera, automatically minimizing image blur.

Reproducibility of actual colors. The Hitachi VK-S655N/EN recreates the actual color to the fullest extent possible not just in well-lit areas, but in darker ones, allowing more accurate depiction of the surveillance area.

Digital output ensures transmission of high-quality, low-noise images. The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Zoom chassis camera incorporated in network camera

Digital output ensures transmission of high-quality, low-noise images. The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Wide dynamic range

When a surveillance scene includes bright and dark areas, alternate images are captured at optimum exposure for both levels of illumination, and the resulting two fields are combined into a single frame. This produces clear, glare-free images in a variety of lighting conditions, such as entrances with varying levels of indoor/outdoor illumination and situations where backlighting can make it difficult to identify facial features.

Progressive scanning

Conventional surveillance camera systems using interlaced scanning are not capable of producing clearly identifiable images of moving cars or people. The interface method uses two scans to create a single image frame, producing jumpy, poorly defined images when still images are captured from the video feed. Progressive scanning incorporated in the Hitachi VK-S655N/EN records the frame in a single sequential scan, creating sharp, high resolution still images, with clearly defined lines and contours.

Electronic image stabilization

Based on Hitachi’s track record of pioneering image stabilization technology, electronic image stabilization compensates for vibration or movement of the camera, automatically minimizing image blur.

The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Zoom chassis camera incorporated in network camera

Digital output ensures transmission of high-quality, low-noise images. The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Wide dynamic range

When a surveillance scene includes bright and dark areas, alternate images are captured at optimum exposure for both levels of illumination, and the resulting two fields are combined into a single frame. This produces clear, glare-free images in a variety of lighting conditions, such as entrances with varying levels of indoor/outdoor illumination and situations where backlighting can make it difficult to identify facial features.

Progressive scanning

Conventional surveillance camera systems using interlaced scanning are not capable of producing clearly identifiable images of moving cars or people. The interface method uses two scans to create a single image frame, producing jumpy, poorly defined images when still images are captured from the video feed. Progressive scanning incorporated in the Hitachi VK-S655N/EN records the frame in a single sequential scan, creating sharp, high resolution still images, with clearly defined lines and contours.

Electronic image stabilization

Based on Hitachi’s track record of pioneering image stabilization technology, electronic image stabilization compensates for vibration or movement of the camera, automatically minimizing image blur.

Reproducibility of actual colors. The Hitachi VK-S655N/EN recreates the actual color to the fullest extent possible not just in well-lit areas, but in darker ones, allowing more accurate depiction of the surveillance area.

Digital output ensures transmission of high-quality, low-noise images. The Hitachi VK-S655N/EN offers digital output for lossless, noise-free image data, maximizing camera performance and preserving the exceptional quality of captured images.

Wide dynamic range

When a surveillance scene includes bright and dark areas, alternate images are captured at optimum exposure for both levels of illumination, and the resulting two fields are combined into a single frame. This produces clear, glare-free images in a variety of lighting conditions, such as entrances with varying levels of indoor/outdoor illumination and situations where backlighting can make it difficult to identify facial features.

Progressive scanning

Conventional surveillance camera systems using interlaced scanning are not capable of producing clearly identifiable images of moving cars or people. The interface method uses two scans to create a single image frame, producing jumpy, poorly defined images when still images are captured from the video feed. Progressive scanning incorporated in the Hitachi VK-S655N/EN records the frame in a single sequential scan, creating sharp, high resolution still images, with clearly defined lines and contours.

Electronic image stabilization

Based on Hitachi’s track record of pioneering image stabilization technology, electronic image stabilization compensates for vibration or movement of the camera, automatically minimizing image blur.