



## VC367-DSP / VC367C-DSP 1/3-Inch Digital Color Camera

- DSP (Digital Signal Processing) for clear crisp images
- Brilliant true color
- Automatic linear electronic shutter
- Backlight compensation
- Accepts video- or DC-drive autoiris lenses
- Internal synchronizing system
- Accepts C- or CS-mount lenses
- NTSC and PAL versions

The VC367-DSP 1/3-Inch Digital Color Cameras combine excellent picture quality with advanced features. The VC366-DSP CCD device has over 379,000 pixels (NTSC; PAL has over 437,000). This provides a sharp color image with accurate color rendition provided by an automatic through-the-lens (TTL) color compensation system. A linear shutter with speeds up to 1/100,000 second allows use in varying light levels without having an autoiris lens.

DSP cameras take the analog signal, convert it to digital format, adjust specific video parameters and display the image in analog format. Digital control offers crisp lines, detail reproduction and assures that functions are unaffected by time and temperature. These cameras feature the extremely low levels of lag, blooming, and transfer smear characteristic of CCD pickup devices.

The VC367-DSP has a minimum scene illumination of 0.05 footcandles (0.5 lux) at 50 IRE; at 20 IRE, sensitivity is 0.01 footcandles (0.1 lux). Horizontal resolution is 540 horizontal TV lines.

The camera has dual autoiris modes, video-drive lenses (ES and AC models) and DC-drive (CS-G) lenses. Connection of the video-drive lens is by screw terminals. The CS-G lenses' circuit is located in the camera and lenses come with a molded connector. To connect the CS-G lens, plug the connector into the mating connector on the camera.

All controls on the camera are located on the rear panel. Synchronization is internal. Selectable backlight compensation permits the camera to generate correctly exposed images in a variety of difficult lighting situations.

The cameras accept C-mount and CS-mount lenses. A fully isolated power supply provides stable images when they are used on a common power supply with other cameras.

The cameras meet IEC 1146-1 standards for non-broadcast single-sensor cameras and comply with radiation requirements for an FCC Class A device.

### ASSOCIATED EQUIPMENT AND ACCESSORIES

**Models VC24PS-1/VC24PS-1-230 Power Supplies, Product Codes 4297/4297-01:** Convert 120/230VAC line power to 24 VAC. Product Specification 564.

**Model V2448-175PS Power Supply, Product Code 6410-20:** 4-channel, 24/28 VAC output, 7/6.25 A (total). Product Specification 738.

**Models V248-3.5PS and V2416-8PS Power Supplies, Product Codes 7668/7669:** 8/16-channel, 24 VAC output, 3.5/8 A (total). Product Specification V082.

Model Number	Product Code	Operating System	Input Power
VC367-DSP	8309-64	NTSC	24 V, 60 Hz
VC367C-DSP	8309-63	PAL	24 V, 50 Hz

**Table 1: Models and Product Codes**

# Technical Information

## VIDEO CHARACTERISTICS

**Image Device:** 1/3-inch interline transfer CCD chip with complementary color filters.

**Active Picture Elements:** VC367DSP: 768 (H) × 494 (V).  
VC367C-DSP: 752 (H) × 582 (V).

**Sensitivity:** 0.05 fc (0.5 lux) at 50 IRE;  
0.01 fc (0.1 lux) at 20 IRE.  
Conditions: scene illumination, lens at f/1.2.

**Horizontal Resolution:** 540 TV lines.

**Automatic Linear Electronic Shutter:** VC367-DSP:  
1/60 to 1/100,000 sec.  
VC367C-DSP:  
1/50 to 1/100,000 sec.

**Scanning System:** 2:1 interlace, 3:4 aspect ratio.  
NTSC: 525 lines, 60 fields/sec.  
PAL: 625 lines, 50 fields/sec.

**Integration Mode:** Field integration.

**Geometric Distortion:** None.

**Horizontal Frequency:** NTSC: 15.734 Hz (internal).  
PAL: 15.625 kHz.

**Vertical Frequency:** NTSC: 59.94 Hz (internal).  
PAL: 50 Hz.

**Signal-to-Noise Ratio:** Better than 50 dB (AGC off).

**Automatic White Balance:** 2300 to 9000 K.

**Video Signal Output:** 1.0 V p-p composite video consisting of 714 mV video signal, 286 mV negative-going sync signal; 140 IRE (100 IRE video, 40 IRE sync).

**Synchronization In:** Internal crystal control.

**Output for Autoiris:** Two types of autoiris operation:  
1. For video-drive lenses (ES and AC lenses):  
Power: 50 mA at 9 V, regulated.  
Video signal: composite video.  
2. Internal autoiris board for DC-drive (CS-G) autoiris lenses.

## ELECTRICAL

**Input Power Source:** 24 VAC ±20%, 200 mA.  
12 VDC ±20%, 200 mA.

**Input Power Isolation:** Internal fully isolated power supply.

**Power Consumption:** 3 W maximum.

**Heat Equivalent:** 0.17 btu/min (0.04 kg-cal/min).  
NOTE: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

## Radio Frequency

**Emission Standard:** FCC Class A.

**IEC Standard:** 1146-1, for non-broadcast single-sensor cameras.

## CONTROLS AND CONNECTORS

**External Controls:** 7-position DIP Switch selects: Electronic or automatic linear shutter mode, ELC (EE) or ALC (AI); back-light compensation, on or off; motion detect, on or off; automatic gain control (AGC), on or off; flickerless, on or off; day/night, on or off; sharpness, on or off.  
Video/DC drive select switch.  
Autoiris level control (DC lens).  
Power indicator.

**Connectors:** Power: clamping screw terminals.  
Video-drive (ES or AC) autoiris lenses: clamping screw terminals.  
DC-drive (CS-G) autoiris lenses: 4-pin molded connector.  
Video out: BNC.

## MECHANICAL

**Dimensions:** Height (H): 3.0 in. (76 mm).  
Width (W): 2.3 in. (59.4 mm).  
Length (L): 2.9 in. (74.8 mm).

**Distance from Base to Optical Center of Lens (X):** 1.25 in. (32 mm).

**Weight:** 0.35 lb (158 g).

**Mechanical Focus:** Adjustable, self-locking.

**Lens Mount:** C and CS mounts included.

### Maximum Lens Penetration into Camera:

Measured from lens mounting surface on front of camera.  
CS mount: 0.180 in. (4.6 mm).  
C mount: 0.380 in. (9.6 mm).

**Camera Mounting:** 1/4-20 threaded hole in camera bottom and camera top.

**Shipping Dimensions:** Height: 3.75 in. (95 mm).  
Width: 5.0 in. (127 mm).  
Length: 4.0 in. (102 mm).

**Shipping Weight:** 0.55 lb (0.25 kg).

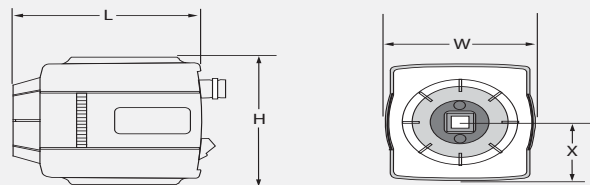
**Shipping Volume:** 0.04 ft<sup>3</sup> (0.001 m<sup>3</sup>).

## ENVIRONMENTAL

**Operating Temperature Range:** 14 to 122° F (-10 to +50° C).

**Humidity/Storage:** Up to 85% relative, noncondensing.

**Storage Temperature Range:** -20 to 140° F (-29 to 60° C).



89 Arkay Drive  
Hauppauge, NY 11788  
www.vicon-cctv.com

TEL: 631-952-2288  
FAX: 631-951-2288  
TOLL FREE: 800-645-9116