



VC566DN 1/3-Inch Super-High-Resolution Day/Night Color Camera

- **DSP (Digital Signal Processing) for clear crisp images**
- **Dual mode color and monochrome**
- **Automatically switches from color to monochrome in low-light conditions**
- **Electronic iris**
- **Intelligent backlight compensation**
- **Accepts video- or DC-drive autoiris lenses**
- **Line-locking with V-phase or internal synchronization**

The VC566DN 1/3-Inch Super-High-Resolution Digital Day/Night Camera combines excellent picture quality with advanced features. It is a dual mode color and monochrome camera with digital signal processing (DSP). DSP control offers crisp lines and detail reproduction. The CCD device has over 379,000 pixels (437,000 PAL), providing a sharp color image with accurate color rendition.

The VC566DN provides video images at any light level. The camera can be set to switch from color mode to monochrome mode. As the camera senses the amount of light in the viewing area, it automatically turns the IR cut filter on and off as

required. The user can also manually switch modes for specific applications. An intelligent backlight compensation control determines the lighting conditions of all objects in the scene.

Sensitivity is f 0.0009 footcandles (0.01 lux) in night/b&w mode or 0.05 footcandles (0.5 lux) in day/color mode. Horizontal resolution is 580 TV lines in night/b&w mode and 540 TV lines in day/color mode.

The VC566DN has dual autoiris modes, video-drive lenses (ES and AC models) and DC-drive (CS-G) lenses. A connector is provided on the side of the camera. All controls and connectors are conveniently located either on the rear panel or side. Synchronization is selectable, internal or line locking; multiple cameras can be synchronized using the line-lock function.

The VC566DN accepts CS-mount or C-mount lenses. A fully isolated power supply provides stable images when the VC566DN is used on a common power supply with other cameras.

The VC566DN meets UL 2044 standards and complies with radiation requirements for an FCC Class A device.

ASSOCIATED EQUIPMENT AND ACCESSORIES

Model VC24PS-1 Power Supply, Product Code 4297: Converts 120 VAC line power to 24 VAC. Product Specification 564.

Model VC24PS-1-230 Power Supply, Product Code 4297-01: Converts 220- 240 VAC line power to 24 VAC. Product Specification 564.

Model V2448-175PS Power Supply, Product Code 6410-20: Converts 120 VAC line power to 24/28 VAC, 4-channel. Product Specification 738.

Model V248-3.5PS and V2416-8PS Power Supplies, Product Codes 7668 and 7669: Converts 120 VAC line power to 24 VAC, 8/16-channel. Product Specification V082.

VIDEO CHARACTERISTICS

Image Device: 1/3-inch interline transfer CCD.

Active Picture Elements: NTSC: 768 (H) x 494 (V).
PAL: 752 (H) x 582 (V).

Sensitivity: 0.0009 fc (0.01 lux) in night/b&w mode. 0.05 fc (0.5 lux) in day/color mode.
Conditions: incandescent lighting, lens at f/1.2 and 25 IRE video output.

Horizontal Resolution: 580 lines (night/b&w mode).
540 lines (day/color mode).

Electronic Iris: NTSC: 1/60-1/100,000.
PAL: 1/50-1/100,000.

Scanning System: NTSC standard: 2:1 interlace, 525 lines, 30 frames/sec.
PAL standard: 2:1 interlace, 625 lines, 25 frames/sec

Backlight Compensation: ON/OFF select, center weighted zone.

Signal-to-Noise Ratio: Better than 50 dB.

White Balance: Automatic/manual selectable.

Video Signal Output: 1.0 V p-p VBS @ 75 ohms composite video.

Synchronization In: Line-locking with vertical phase adjustment or internal crystal control.

Gain Control: Automatic (AGC), ON/OFF select.

Gamma Correction: ON/OFF select.

Output for Autoiris: Two types of autoiris operation:
1. For video-drive lenses (ES and AC lenses):
Power: 50 mA at 12 VDC;
Video output: high impedance.
2. DC-drive coil (CS-G) autoiris lenses.

ELECTRICAL

Input Power Source: 24 VAC, ±20%.

Input Power Isolation: Internal fully isolated power.

Current: 0.3 A.

Power Consumption: < 6 W.

Heat Equivalent: 0.34 btu/min (0.09 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.

Safety Standard: UL 2044.

CONTROLS AND CONNECTORS

External Controls: Power Indicator: LED.
ALC level: potentiometer.
AWB Hold: push button.
Mode Select DIP Switch:
INT/LL.
BLC ON/OFF.
ALC/ELC (AI/EE).
AWB/ATW.
AGC ON/OFF.
DAY & NIGHT ON/OFF.
GAMMA ON/OFF.
V-Phase Adjustment push button.

Connectors: Power: 2-pin terminal (side).
Autoiris lenses (DC drive): 4-pin molded connector (rear).
Autoiris lenses (video drive): 3-pin terminal block.
Video out: BNC (rear).

MECHANICAL

Dimensions: Height (H): 2.0 in. (50 mm).
Width (W): 2.4 in. (60 mm).
Length (L): 5.0 in. (126.5 mm).

Distance from Base to Optical Center of Lens (X): 1.0 in. (25 mm).

Weight: 0.84 lb (0.38 kg).

Flange Back Adjustment: 12.5 mm ± 0.5 mm.

Lens Mount: C or CS mount.

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

Shipping Dimensions: Height: 3.2 in. (80 mm).
Width: 3.9 in. (98 mm).
Length: 7.3 in. (185 mm).

Shipping Weight: 1.5 lb (0.52 kg).

Shipping Volume: 0.053 ft³ (0.0015 m³).

ENVIRONMENTAL

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

Humidity: Up to 90% relative, noncondensing.

