



CCC5100H Digital SIMD Color Camera

1/3-INCH, HIGH RESOLUTION, 480 TVL (NTSC/PAL), SUPER WIDE DYNAMIC RANGE

Product Features

- 1/3-inch, Super Wide Dynamic Range SIMD Imager
- 95 dB Typical/120 dB Maximum
- Horizontal Resolution of more than 480 TV Lines
- Supports NTSC and PAL in Same Model
- Standard Unshielded Twisted Pair (UTP) Output
- Single Instruction, Multiple Data (SIMD) Imaging Technology
- Outstanding Color Reproduction
- Six White Balance Modes
- Backlight Compensation Mode
- Electronic Iris Control
- On-Screen Menu Configuration
- DC-Drive Auto Iris Lens Compatibility
- Optional Integral Feedthrough Mount



CAMERA MOUNTED ON
OPTIONAL PCM150 CAMERA MOUNT

(LENS AND MOUNT NOT SUPPLIED WITH CAMERA)

The **CCC5100H** introduces a new era in CCTV imaging technology. The single instruction, multiple data (SIMD) imager used in this camera is the first to be designed and optimized for security applications. It can see both light and dark objects in the same scene. Because of its new multi-sample approach, this camera achieves higher image quality than any CCD camera currently on the market.

When light strikes the SIMD imager, it is converted to a digital signal at the pixel level. Instead of adjusting the exposure of the entire scene, the SIMD processor analyzes and corrects the exposure pixel-by-pixel. This provides optimal exposure and natural color rendering over a wide range of lighting conditions.

The SIMD imager uses this technology to develop color information. Its progressive scanning ability utilizes every pixel on every field, unlike a CCD imager. As a result, the SIMD camera achieves double the vertical resolution of a CCD imager and dramatically decreases digital distortion.

The **CCC5100H** also offers a color bar generator for monitor adjustment as well as an in-focus indicator.

For most applications, the **CCC5100H** is ready out-of-the-box without any programming. On power-up, it uses the following to select either NTSC or PAL video format:

- 1) Pelco V-Sync signal from a Pelco head-end control system (CM6700, CM6800, CM6800E)
- 2) Two-button override (required for DC voltage or countries with other AC frequency/video format combinations)
- 3) AC line frequency – PAL for 50 Hz, NTSC for 60 Hz

For demanding applications, the **CCC5100H** offers a rich set of options that are programmable via on-screen menus. These menus can be accessed locally at the camera using rear panel buttons or remotely from selected Pelco head-end control systems, using Pelco P, Pelco D, or Coaxitron® protocols. All programmable settings can be grouped into any of eight profiles: six factory-defined, two user-defined. These profiles may all be invoked from the head-end using preset calls, either manually or as part of a programmed macro. In this way, camera performance can be optimized quickly and automatically as conditions change.

The **CCC5100H** also supports unshielded twisted pair (UTP) output. Use it to transmit video over twisted pair cable.



DataFAX
SPEC: 22910
MANUAL: 229106

C2910 / NEW 10-04



International Organization
for Standardization;
Registered ISO 9001



TECHNICAL SPECIFICATIONS

MODEL

CCC5100H-6 1/3-inch high resolution digital SIMD color camera, 12-36 VDC $\pm 10\%$ or 24-28 VAC $\pm 10\%$, 50/60 Hz

GENERAL

Imaging Device 1/3-inch SIMD
 Dynamic Range 95 dB typical/120 dB maximum
 Picture Elements Sensor resolution: 742 (H) x 552 (V)
 Scanning System 525 (NTSC)/625 (PAL) lines, 2:1 interlace
 Synchronization Internal/line lock/Pelco V-Sync
 Horizontal Resolution More than 480 TV lines
 Iris Control Automatic/manual
 Electronic Shutter Range 1/15 to 1/3,500 second
 Auto Iris Lens Type DC-drive
 Sensitivity 0.8 lux, F1.2, 40 IRE, AGC on, 75% scene reflectance
 Signal-to-Noise Ratio 52 dB, AGC off
 Vertical Phase Adjustable $\pm 120^\circ$
 Automatic Gain Control On-screen menu, adjustable to 21 dB
 Backlight Compensation On-screen menu, on/off, four regions
 Signal Processing SIMD digital signal processing (DSP)
 Video Output 1.0 to 1.2 Vp-p, 75 ohms, adjustable
 Auto White Balance Range 2,000° to 11,000°K
 Gamma Correction 0.45 NTSC, 0.36 PAL, adjustable (0.25-1.00)

ELECTRICAL

Power Requirements 12-36 VDC $\pm 10\%$ or 24-28 VAC $\pm 10\%$, 47-63 Hz; autosensing
 Power Consumption 4.5 watts maximum
 Power Connector 2-pin socket and terminal block with retention screw
 Video Connector BNC
 Multifunction Connector 10-pin RJ45-10:
 Analog composite video
 Unshielded twisted pair (UTP) video
 Low voltage power
 Data I/O (Pelco P or Pelco D protocol)
 Service Connector 3-conductor, 2.5 mm connector for optional CST100/CST150 camera setup tool
 Auto Iris Connector 4-pin connector (miniature square)

MECHANICAL

Lens Mount C/CS mount
 Camera Mount 1/4-inch UNC-20 screw, top or bottom of camera housing

ENVIRONMENTAL

Operating Temperature 14° to 122°F (-10° to 50°C)
 Storage Temperature -40° to 140°F (-40° to 60°C)
 Humidity 20% to 80%, noncondensing

PHYSICAL

Weight (without lens) 0.40 lb (0.20 kg)
 Shipping Weight 1 lb (0.45 kg)

CERTIFICATIONS/PATENTS

- CE, Class B
- FCC, Class B
- UL Listed
- UL Listed to Canadian safety standards

RECOMMENDED MOUNTS

PCM150 Adjustable integrated camera mount for indoor wall or ceiling application. Includes integrated cable for easy plug and play operation. Can also be adapted to a standard 2 x 4-inch (5.08 x 10.16 cm) electrical box.
 BS1750/CM1750/CM1750S/TB1750 Adjustable swivel head camera mounts for indoor wall, ceiling, or pedestal mounting.

RECOMMENDED POWER SUPPLIES

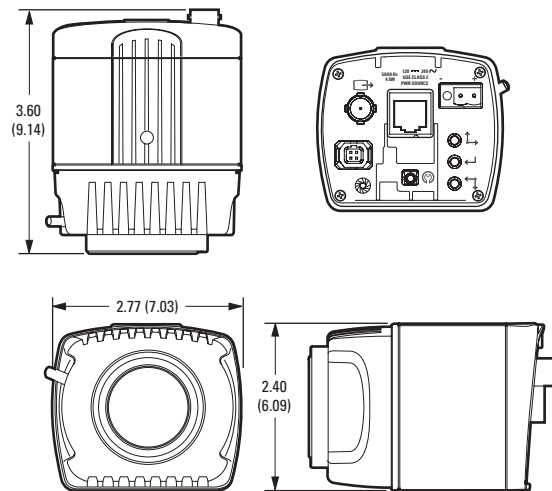
TF2000 Power supply for one 24 VAC camera, 20 VA
 MCS Series Multiple 24 VAC camera power supply, indoor
 WCS Series Single/multiple 24 VAC camera power supply, outdoor

RECOMMENDED LENSES

13FA, 13FD Series Fixed focal length lenses, 1/3-inch format: FA (manual iris), FD (auto iris, DD)
 13VA, 13VD Series Varifocal lenses, 1/3-inch format: VA (manual iris), VD (auto iris, DD)
 13ZD, 13ZM Series Motorized zoom lenses, 1/3-inch format ZD (auto iris, DD), ZM (manual iris)

OPTIONAL ACCESSORIES

CST100 Handheld camera setup tool with composite video output. Connects to a user-supplied analog monitor.
 CST150 Handheld camera setup tool with integrated microdisplay.



NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE IN INCHES.

NOTE: For outdoor camera installations, a Pelco enclosure is recommended.



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