

# C10DN Series Day/Night, CCD Color Camera

## 1/3-INCH, ULTRA HIGH RESOLUTION, 540 TVL (NTSC/PAL)

### Product Features

- Compact Body Style
- Day/Night with Automatic or Manual Control
- 1/3-Inch Format CCD Imager
- Digital Signal Processing
- 540 TV Lines
- On-Screen Menu Configuration with Side Joystick
- 4 Preset Application Profiles; 1 User-Definable Profile
- Automatic White Balance, Automatic Gain Control, Electronic Shutter Control, and Backlight Compensation
- Flickerless Mode
- Autosensing DC Drive Auto Iris
- CS Lens Mount
- Autosensing 24 VAC/12 VDC with Line Lock or Internal Synchronization
- Long Distance Cable Compensation
- Internal Top/Bottom Mount
- Eclipser Function

The **C10DN Series** camera is Pelco's smallest, day/night camera. Its day/night technology provides outstanding performance over a wide range of lighting conditions. The camera uses a removable infrared (IR) cut filter to switch between color and black-white (B-W) modes as environmental lighting conditions change, and the need for infrared sensitivity is realized.

The **C10DN Series** is an ultra high resolution digital camera with 540 TVL of resolution and 0.3 lux minimum illumination in day mode and 0.07 lux in night mode. Camera features include autosensing power (24 VAC with internal line lock or 12 VDC with internal synchronization), automatic gain control (AGC), electronic shutter control (ESC), and flickerless mode. The **C10DN Series** also includes automatic white balance (AWB) for difficult lighting situations, and backlight compensation (BLC) that adjusts the picture to prevent objects from appearing dark due to a strong backlight. These fine-tuning features are easily set using the on-screen menus.



**C10DN-6/C10DN-6X**  
(LENS NOT SUPPLIED WITH CAMERA)



**C10DN-7X**  
(LENS NOT SUPPLIED WITH CAMERA)

The **C10DN Series** camera has a standard CS mount and can be used with fixed, manual, or DC drive auto iris lenses. The auto iris is controlled through a standard 4-pin square connector that is included with all Pelco auto iris lenses. A back panel control allows you to control the **C10DN Series** with an external IR light during B-W mode operation.

The convenient on-screen menu allows you to select area masking, titling, pixel correction, and preset lighting profiles, features which are not typically found in a compact camera. Also, the **C10DN Series** allows on-screen setup of color/B-W modes.

The **C10DN Series** is quick and easy to install. The C10DN-6 and C10DN-6X are ideal for use with DF5, DF8A, EH100, EH3508, and EH2508 enclosures. The camera is also featured in Pelco's DomePak<sup>®</sup> and ImagePak<sup>®</sup> fixed camera dome/enclosure packages. The optional C10-UM wall/ceiling/rail mount kit offers easy installation in many nonenclosure applications, for all models (C10DN-6, C10DN-6X, and C10DN-7X).



by Schneider Electric



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# TECHNICAL SPECIFICATIONS

## MODELS

C10DN-6	1/3-inch high resolution day/night, CCD camera; 24 VAC or 12 VDC; NTSC format
C10DN-6X	1/3-inch high resolution day/night, CCD camera; 24 VAC or 12 VDC; PAL format
C10DN-7X	1/3-inch high resolution day/night, CCD camera; 230 VAC, PAL format

## GENERAL

Day/Night Operation	
Day	Infrared (IR) cut filter
Night	BK-7 glass, same optical displacement as day mode
Imaging Device	1/3-inch interline transfer CCD
Picture Elements	
NTSC	768 (H) x 494 (V), approx. 380k
PAL	752 (H) x 582 (V), approx. 440k
Sensing Area	3/16 x 1/8-inch (4.7 x 3.5 mm)
Scanning System	
NTSC	525 lines, 2:1 interlace
PAL	625 lines, 2:1 interlace
Synchronization System	AC line lock/internal
Horizontal Resolution	540 TV lines
Auto Iris Lens Type	DC/video drive (autosensing)
Sensitivity	
Color	0.4 lux, f/1.2, 50 IRE, AGC on, 89% scene reflectance
B-W	0.08 lux, f/1.2, 50 IRE, AGC on, 89% scene reflectance
Minimum Illumination	
Color	0.3 lux, f/1.2, 40 IRE, AGC on, 75% scene reflectance
B-W	0.07 lux, f/1.2, 40 IRE, AGC on, 75% scene reflectance
Signal-to-Noise Ratio	>50 dB
Vertical Phase Adjustable	±90°
Automatic Gain Control	Selectable
Electronic Shutter Control	Selectable
Electronic Shutter Range	
NTSC	1/60 sec to 1/100000 sec
PAL	1/50 sec to 1/100000 sec
Backlight Compensation	Selectable
Eclipser Function	Selectable
Auto White Balance	Selectable
Internal Synchronization	Selectable
Gamma	Selectable
Flickerless Mode	Selectable
Signal Processing	Digital signal processing (DSP)
Video Output	1 Vp-p, 75 ohms
Auto White Balance Range	2,500° to 9,500°K

## ELECTRICAL

Power Requirements	
C10DN-6	24 VAC ±15%/12 VDC ±15%, 60 Hz
C10DN-6X	24 VAC ±15%/12 VDC ±15%, 50 Hz
C10DN-7X	230 VAC ±15%, 50 Hz
Power Consumption	3 W
Power Connector	2-pin terminal block with screw lock
Video Connector	BNC
Auto Iris Connector	4-pin connector (miniature square)
Controls	5-position button

## MECHANICAL

Lens Mount	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)
Operating Humidity	20% to 80%, noncondensing
Storage Humidity	20% to 90%, noncondensing

## PHYSICAL

Dimensions (includes BNC)	
C10DN-6/C10DN-6X	2.95" L x 2.17" W x 1.97" H (7.5 x 5.5 x 5.0 cm)
C10DN-7X	5.50" L x 2.17" W x 1.97" H (13.97 x 5.5 x 5.0 cm)
Weight (without lens)	
C10DN-6/C10DN-6X	0.44 lb (0.20 kg)
C10DN-7X	0.88 lb (0.40 kg)
Shipping Weight	
C10DN-6/C10DN-6X	1 lb (0.45 kg)
C10DN-7X	2 lb (0.90 kg)

## CERTIFICATIONS

- CE, Class B
- FCC, Class B
- UL/cUL Listed

## RECOMMENDED MOUNTS

C10-UM	C10 series universal wall/ceiling/rail mount kit
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## 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

13VA, VD, VDIR Series	Varifocal lenses, 1/3-inch format. VA (manual iris); VD (auto iris, DD); VDIR (auto iris, DD, infrared).
13ZD Series	Motorized zoom lenses, 1/3-inch format (auto iris, DD).

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

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