

# C20-CH Series Analog Color Camera

## 1/3-INCH, ULTRA HIGH RESOLUTION, 650 TVL (NTSC/PAL), DIGITAL DAY/NIGHT

### Product Features

- 650 TV Lines
- 0.25 Lux Sensitivity
- 1/3-Inch Format CCD Imager
- Digital Signal Processing
- CS Lens Mount
- Autosensing DC Drive Auto Iris
- Digital Electronic Day/Night
- Automatic/Manual White Balance Settings for Difficult Lighting Situations
- Selectable Automatic Gain Control
- Advanced Backlight Compensation
- Autosensing Power (24 VAC/12 VDC with Internal Synchronization)
- 2D Digital Noise Reduction (DNR)
- Privacy Zones
- Built-in Unshielded Twisted Pair (UTP) Output

The **C20-CH Series** is Pelco's general purpose digital color CCD camera. It is designed for installations with fixed lighting conditions. Its full features insure that images are clear and crisp at all times under consistent light. The camera's size, combined with its numerous features, makes it the ideal camera for most applications.

The **C20-CH Series** is an ultra high resolution digital camera with 650 TVL of resolution and 0.25 lux minimum illumination. Camera features include autosensing power (24 VAC or 12 VDC with internal synchronization), and automatic gain control (AGC).

The **C20-CH Series** includes automatic white balance (AWB) for difficult lighting situations, digital noise reduction for clearer image quality, and backlight compensation (BLC) that adjusts the picture to prevent objects from appearing dark due to a strong backlight.

The **C20-CH Series** also features built-in analytical capabilities including privacy zones, motion detection, and camera titles. These features are easily set using the on-screen menus.



**C20-CH SERIES**  
(LENS NOT SUPPLIED WITH CAMERA)

- Motion Detection
- Camera Titles
- Adaptive Tone Reproduction (ATR) to Compensate for Gradation of Subjects to an Optimum Level

The convenient on-screen menu contains features that are not typically found in a general purpose camera including area masking, titling, pixel correction, and preset lighting profiles.

The **C20-CH Series** is quick and easy to install. The camera is also featured in Pelco's DomePak® and ImagePak® fixed camera dome/enclosure packages. The optional C10-UM wall/ceiling/rail mount kit offers easy installation in many nonenclosure applications, for all models.

The **C20-CH Series** has a standard CS lens mount and can be used with fixed, manual, or auto iris (DC drive) lenses. The iris is controlled through a standard 4-pin square connector that is included on all Pelco auto iris lenses.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



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# TECHNICAL SPECIFICATIONS

## MODELS

C20-CH-6	1/3-inch CCD high resolution color box camera, 24 VAC or 12 VDC, NTSC format
C20-CH-6X	1/3-inch CCD high resolution color box camera, 24 VAC or 12 VDC, PAL format
C20-CH-7X	1/3-inch CCD high resolution color box camera, 220 VAC, PAL format

## GENERAL

Imaging Device	Sony® 1/3-inch EXview HAD CCD II™ 960H
Signal Processing	Sony new digital signal processor, Effio-E™
Picture Elements	
NTSC	976 (H) x 494 (V), approx. 480k
PAL	976 (H) x 582 (V), approx. 570k
Sensing Area	4.7 x 3.5 mm (3/16 x 1/8-inch)
Scanning System	
NTSC	525 lines, 2:1 interlace
PAL	625 lines, 2:1 interlace
Synchronization System	Internal
Horizontal Resolution	650 TV lines
Auto Iris Lens Type	DC drive
Sensitivity	0.25 lux, f/1.2, 30 IRE
Electronic Day/Night Switch	
Signal-to-Noise Ratio	48 dB (>52 dB by parameter adjustment)
Automatic Gain Control	On/off 35 dB
Backlight Compensation	Yes
White Balance	ATW/push lock/manual/anti-CR/user2/user/push
Color Correction	With white balance
Gamma	Selectable (ATR)
Video Output	1 Vp-p, 75 ohms
Auto White Balance Range	2,500° to 9,500°K
Noise Reduction (DNR)	2D
Privacy Zones	Yes
Motion Detection	Yes
Camera Titles	Yes

## ELECTRICAL

Power Requirement	
C20-CH-6	12 VDC/24 VAC +10% to -15%, 60 Hz
C20-CH-6X	12 VDC/24 VAC +10% to -15%, 50 Hz
C20-CH-7X	220 VAC +10% to -15%, 50 Hz
Power Consumption	
C20-CH-6/C20-CH-6X	3.5 W
C20-CH-7X	4 W
Power Connector	2-pin terminal block with push lock, or line cord on 220 VAC models
Video Connector	BNC
Auto Iris Connector	4-pin connector (miniature square)

## MECHANICAL

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

## ENVIRONMENTAL

Operating Temperature	-10° to 50°C (14° to 122°F)
Storage Temperature	-20° to 60°C (-4° to 140°F)
Operating Humidity	20% to 90%, noncondensing
Storage Humidity	20% to 90%, noncondensing

## PHYSICAL

Dimensions (includes BNC)	108 x 60 x 55 mm (4.25" L x 2.36" W x 2.17" H)
Weight (without lens)	
C20-CH-6/C20-CH-6X	0.30 kg (0.66 lb)
C20-CH-7X	0.45 kg (0.99 lb)
Shipping Weight	
C20-CH-6/C20-CH-6X	0.55 kg (1.21 lb)
C20-CH-7X	0.60 kg (1.32 lb)

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

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