C20-DW Series Analog Day/Night WDR Camera
1/3-INCH CCD, 650 TVL WITH HIGH SENSITIVITY, TRUE DAY/NIGHT (ICR), WDR

Product Features

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

C20-DW
(LENS NOT SUPPLIED WITH CAMERA)

- Motion Detection
- Camera Titles
- Adaptive Tone Reproduction (ATR) to Compensate for Gradation of Subjects to an Optimum Level
- Built-in Coaxitron®, RS-485 Pelco D Protocol

The **C20-DW Series** is Pelco's full-featured digital day/night wide dynamic range (WDR) CCD camera. Its WDR technology provides 120 dB dynamic range and produces superior images over a range of lighting conditions, including extreme backlight conditions. Its day/night technology provides outstanding performance in low 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 as the need for infrared sensitivity is realized.

The **C20-DW Series** is an ultra high resolution digital camera with 650 TVL of resolution and 0.13 lux minimum illumination. Camera features include autosensing power (24 VAC or 12 VDC with AC line lock or internal synchronization) and automatic gain control (AGC). The **C20-DW Series** includes automatic white balance (AWB) for difficult lighting situations, digital noise reduction, and backlight compensation (BLC) that adjusts the picture to prevent objects from appearing dark due to a strong backlight. The **C20-DW Series** also uses slow electronic shutter technology to improve the illumination performance for low-light environments.

The **C20-DW Series** has built-in analytical capabilities including privacy zones, motion detection, and camera titles that add to its functionality. These fine-tuning features are easily set using the on-screen menus.

The **C20-DW 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-DW 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.

On-screen configurable menus can be accessed locally using the rear panel button or remotely using any Pelco controller with Pelco D or Coaxitron® protocol. Use these menus to select a specific profile, to customize and save camera settings for the specific application, and trigger alarm out functions.

The **C20-DW Series** is equipped with configurable alarm in and alarm out functions for external devices such as IR lighting control, wiper operation, and local alerting upon alarm of an external device.

The **C20-DW Series** from Pelco is ideal for critical security applications requiring the best analog images in all types of lighting and system configurations.

TECHNICAL SPECIFICATIONS

MODELS

C20-DW-6	1/3-inch CCD high resolution day/night WDR camera, 24 VAC or 12 VDC, NTSC format
C20-DW-6X	1/3-inch CCD high resolution day/night WDR camera, 24 VAC or 12 VDC, PAL format
C20-DW-7X	1/3-inch CCD high resolution day/night WDR camera, 220 VAC, PAL format

GENERAL

Imaging Device	Sony® 1/3-inch SuperHAD CCD II™ 960H
Signal Processing	Sony new digital signal processor, Effio-P™
Dynamic Range	120 dB
Day/Night Operation	
Day	Infrared (IR) cut filter
Night	BK-7 glass, same optical displacement as day mode
Picture Elements	
NTSC	976 (H) x 494 (V), approx. 480k
PAL	976 (H) x 582 (V), approx. 570k
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	650TV lines
Auto Iris Lens Type	DC drive
Electronic Shutter Range	
Manual	1/2 to 1/10,000 sec
Auto NTSC	1/2 to 1/10,000 sec
Auto PAL	1/1.5 to 1/10,000 sec
Sensitivity	
Color	
20ms, PAL; 17ms, NTSC	0.13 lux, f/1.2, 30 IRE
500ms	0.03 lux, f/1.2, 30 IRE
Mono	
20ms, PAL; 17ms, NTSC	0.05 lux, f/1.2, 30 IRE
500ms	0.00004 lux, f/1.2, 30 IRE
Signal-to-Noise Ratio	48 dB (>52 dB by parameter adjustment)
Automatic Gain Control	Off/on up to 36 dB, 16 levels configurable
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)	3D
Color Correction	Adaptive
Privacy Zones	Yes, 15 sizable windows
Motion Detection	Yes, four areas sensitivity selectable
Camera Titles	Yes, up to 20 characters
Digital Zoom	255X
Image Stabilization	Yes, (under 10Hz)
Scene Learning/Analytics	Yes (defocusing, camera tamper)
Remote Access	RS-485 and Coaxitron
Alarm Input	1
Alarm Output	1

ELECTRICAL

Power Requirement	
C20-DW-6	12 VDC/24 VAC +10% to −15%, 60 Hz
C20-DW-6X	12 VDC/24 VAC +10% to −15%, 50 Hz
C20-DW-7X	220 VAC +10% to −15%, 50 Hz
Power Consumption	4.5 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 55°C (14° to 131°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-DW-6/C20-DW-6X	0.30 kg (0.66 lb)
C20-DW-7X	0.45 kg (0.99 lb)
Shipping Weight	
C20-DW-6/C20-DW-6X	0.55 kg (1.21 lb)
C20-DW-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

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)