

# BU6 Series Integrated IR Bullet Camera

18 TO 32 VAC (REVISION A), 1/3-INCH CCD, 650 TVL, WDR, DSS, DAY/NIGHT, RUGGED

## Product Features

- 650 TV Lines
- High Sensitivity (Zero Lux with IR)
- 120 dB Wide Dynamic Range (WDR)
- Optical Day/Night Function to Switch to Day or Night Mode, Depending on the Light Level
- Sony® 1/3-inch Super HAD CCD II™ 960H
- Sony Digital Signal Processor (DSP), Effio-P™
- IR Compensation
- Autosensing Power; 18 to 32 VAC/12 VDC with Internal Synchronization (Revision A)
- Digital Slow Shutter (DSS)
- Digital Zoom
- 3D Digital Noise Reduction (DNR)
- 40 Meters of IR Illumination Distance
- Remote Access Through Coaxitron® and RS-485
- Weathertight Outdoor Operation (IP66)
- Rugged, Vandal-Resistant Design (IK10)

BU6-IRWV50-6X



- Environmental Capability with a Wide Operating Temperature
- Privacy Zones
- Motion Detection
- Camera Titles
- Alarm Output

The **BU6 Series** is Pelco's premium grade, longer-range integrated IR bullet CCD camera. It uses a group of integrated infrared LEDs to deliver high quality pictures, even at night with zero illumination. Its WDR and day/night technology provides outstanding performance over a wide range of low-light conditions, including extreme backlight conditions. The camera uses a removable infrared (IR) cut filter to switch between color and black-white modes as environmental lighting conditions change, and when the need for infrared sensitivity is realized.

The **BU6 Series** is an ultra high resolution digital camera with 650 TVL of resolution and a minimum of 0.13 lux illumination in color mode. In low-light conditions, the camera can use digital slow shutter (DSS) to produce 0.03 lux sensitivity. The **BU6 Series** is equipped with high performance IR compensation. The camera can be set manually to adjust IR illumination levels, enabling customers to change the levels of luminance and contrast according to the shooting environment. This function reduces the blooming effect and delivers clear images when objects get closer to the camera. With IR supplemental lighting, the **BU6 Series** operates under zero lux (monochrome mode). Camera features include autosensing power; 18 to 32 VAC or 12 VDC with internal synchronization (Revision A) and automatic gain control (AGC).

The **BU6 Series** includes automatic white balance (AWB) for difficult lighting situations, digital noise reduction (DNR) that minimizes environment noise levels to produce clear image quality, 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 configured using the convenient on-screen menus and can be accessed using the bottom 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 **BU6 Series** has a rugged, vandal-resistance design and an impact resistance that meets the IK10 standard. The **BU6 Series** has wide a operating temperature -30° to 50°C (-22° to 122°F), which makes it an ideal solution for outdoor applications. The **BU6 Series** also meets weathertight IP66 standards.

The **BU6 Series** has built-in analytical capabilities including privacy zones, motion detection, and camera titles that add to its functionality and make it suitable for most applications.

Typical applications for **BU6 Series** include longer-range and medium-range outdoor boundary surveillance that has zero light at night and a need to supplement the scene with IR light. The true day/night functionality provides the best images in low-light and IR light applications by using a black-white mode function.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



C4004 / REVISED 04-21-14

# TECHNICAL SPECIFICATIONS

## ELECTRICAL

Power Requirement (Revision A)\*

NTSC	18 to 32 VAC/12 VDC+10% to -15%, 60 Hz
PAL	18 to 32 VAC/12 VDC +10% to -15%, 50 Hz

Power Consumption	8 W (IR on, without heater); 22 W (IR on, with heater on)
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Power Connector	2-pin terminal block with screw terminals
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Video Connector	BNC
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Alarm Output	2-pin terminal block with screw terminals
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\*Suggested installations (Revision A):

For outdoor environmental conditions from -30° to 50°C (-22° to 122°F), use only an AC power supply source (18 to 32 VAC).

For indoor or outdoor applications with ambient temperatures of 0°C to 50°C (32° to 122°F), use 12 VDC power, or an AC power supply source (18 to 32 VAC).

## ENVIRONMENTAL

Operating Temperature	-30° to 55°C (-22° to 131°F)
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Storage Temperature	-30° to 60°C (-22° to 140°F)
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Operating Humidity	20% to 98%, noncondensing
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Storage Humidity	20% to 98%, noncondensing
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## PHYSICAL

Construction	Die-cast aluminum
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Unit Weight	1.55 kg (3.41 lb)
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Shipping Weight	2.05 kg (4.51 lb)
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## CERTIFICATIONS

- CE, Class B
- FCC, Class B
- UL/cUL Listed
- Meets IP66 standards

## RECOMMENDED ACCESSORIES

BU-ADAPTER	BU Series cameras to a wall or a ceiling surface mounted conduit box (not included)
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## RECOMMENDED POWER SUPPLIES

TF9000	Power supply for camera, 50 VA
MCS Series	Multiple camera power supply, indoor
WCS Series	Single/multiple camera power supply, outdoor

# TECHNICAL SPECIFICATIONS

## CAMERA/OPTICS

Imaging Sensor	Sony 1/3-inch Super HAD CCD II 960H	
Signal Processing	Sony DSP, Effio-P™	
Day/Night Operation		
Day	Infrared (IR) cut filter	
Night	BK-7 glass, same optical displacement as day mode	
Effective Pixels		
NTSC	976 (H) x 494 (V), approx. 480K	
PAL	976 (H) x 582 (V), approx. 570K	
Scanning Area	4.7 mm (H) x 3.5 mm (V) (0.19 x 0.14 inch)	
Scanning System		
NTSC	525 lines, 2:1 interlace	
PAL	625 lines, 2:1 interlace	
Scanning Frequency	Horizontal	Vertical
NTSC	15.734 kHz	59.94 Hz
PAL	15.625 kHz	50.00 Hz
Synchronization	Internal	
Horizontal Resolution	650 TVL	
Minimum Illumination	f/1.6; 2,850°K; 30 IRE; Color (NTSC: 17 ms/ PAL: 20 ms) 0.1 lux; Color (500 ms) 0.03 lux; Mono (with IR) 0.0 lux	
IR Cut Filter	Yes, D/N switch	
Dynamic Range	120 dB dual-scan WDR	
IR Illumination Distance	40 m	
IR Sensitivity	>40% at 850 nm, peak response	
Low-Light Technology	32 LEDs	
Electronic Shutter Range		
NTSC	Auto, 1/60 to 1/100,000 sec; Manual, 1/60 to 1/10,000 sec	
PAL	Auto, 1/50 to 1/100,000 sec; Manual, 1/50 to 1/10,000 sec	
<b>Note:</b> Slow shutter support is 2X to 128X.		
Video Output	1.0 Vp-p, NTSC/PAL composite, 75 ohms, BNC connector	
Auto White Balance Range	2,000° to 9,500°K	
White Balance	ATW/Manual/Push/Push lock/User1/User2/ Anti CR	
Signal-to-Noise Ratio	48 dB (>52 dB by parameter adjustment)	
Automatic Gain Control	Off/on up to 36 dB, 16 levels configurable	
Lens	6 to 50 mm varifocal lens	
Backlight Compensation	Yes	
F-Number	f/1.6	
Focal Length	6 to 50 mm	
Focus Range	∞ to 1.5 m (4.9 ft)	
Angle of View	<u>6 mm (wide)</u>	<u>50 mm (telephoto)</u>
Horizontal	46°	7°
Vertical	33°	5°
Adjusting Angle		
Panning Range	±180°	
Tilting Range	±90°	
Rotation Range	±360°	
Digital Noise Reduction	3D	
Privacy Zones	Yes, 15 sizable windows	
Motion Detection	Yes; 4 areas, sensitivity selectable	
Camera Titles	Yes, 20 characters	
Digital Zoom	Yes, 255X (through camera menu only)	
Image Stabilization	Yes (under 10 Hz)	
Scene Learning/Analytics	Yes, defocusing	
Remote Access	RS-485 and Coaxitron	

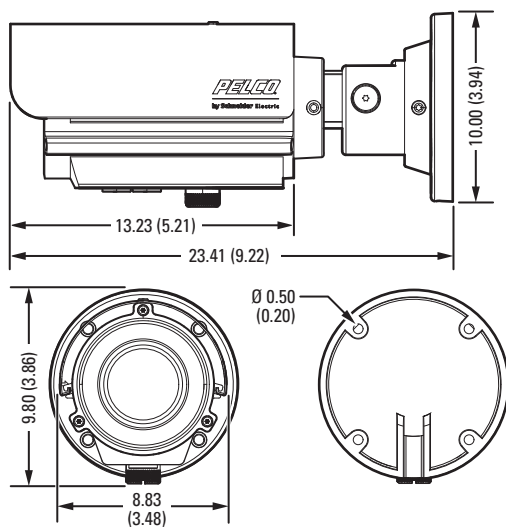
# TECHNICAL SPECIFICATIONS

## MODELS

BU6-IRWV50-6	High resolution IR bullet camera, 1/3-inch CCD, true day/night, DSS, 18 to 32 VAC or 12 VDC (Revision A), NTSC format
BU6-IRWV50-6X	High resolution IR bullet camera, 1/3-inch CCD, true day/night, DSS, 18 to 32 VAC or 12 VDC (Revision A), PAL format



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



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