



#### **BOCK OPTRONICS INC.**

14 Steinway Blvd., Unit 7 Toronto, Ontario M9W 6M6

Tel: (416) 674-2804 sales@bockoptronics.ca www.bockoptronics.ca



### Ordering Information

NISC Models			
KPC-N501NUB	2,8~12mm	VF	Black
KPC-N501NUW	2.8~12mm	VF	White
PAL Models			
KPC-N501PUB	2.8~12mm	VF	Black

Resolution 960



Resolution 960 Series 750+HTVL Invisible IR True D/N Dual Voltage IP66 Bullet Camera



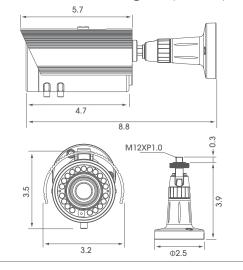
## Resolution 960



Resolution 960 Series 750+HTVL Invisible IR True D/N Dual Voltage IP66 Bullet Camera



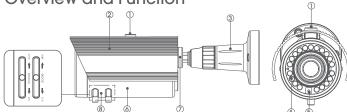
#### General Feature Diagram (Unit: inch)



#### **Key Features**

- Superlative resolution of over 750 horizontal TV lines for amazing image quality
- EXview HAD 960H CCD II for high sensor IR sensitivity
- Varifocal 2.8~12 mm DC iris lens to capture the desired field of view
- True Day/Night, 20 Invisible IR LEDs (82 feet or more depending on scene reflectivity)
- "Invisible" (940 nm) IR LEDs cannot be seen by the human eye
- Reflection preventing dual section cover glass isolates IR emitters from lens to prevent image distortion
- Simple and easy to use OSD setup menu
- Adaptive Tone Curve Reproduction (ATR)
- Electronic Wide Dynamic Range to properly expose images during unbalanced light contrast in the scene
- Anti Color Roll white balance option resists fluorescent light interference
- Optional Back Light Compensation (BLC) and Highlight Compensation (HLC)
- Adjustable 2D-Noise Reduction to increase picture clarity and improve utilization of DVR disk storage
- Privacy image masking for 4 configurable zones
- Dual voltage (12V DC/ 24V AC) with Anti Color Roll
- IP66 (Weather Resistant)
- Extreme Operating temperature down to -40 degrees
- External lens adjustment and service Video output for convenient installation, and ease of service
- 3-axis bracket conceals and protects cable
- Five year warranty





- 1) Sunshield Fixing Bolt
- 2 Sunshield
- (3) Mounting Bracket
- 4 LED : 20ea
- ⑤ Photo cell
- 6 Body
- 7 Body Fixing Ring
- 8 External Zoom and Focus adjustment

#### **Technical Specification**

Model	N501NU	N501PU	
Imaging Device	1/3" Sony Exview HAD II 960H High Se	<u> </u>	
Video Format	NTSC	PAL	
Picture Elements	1020 (H) x 508 (V)	1020 (H) x 596 (V)	
Effective Picture Elements	976 (H) x 494 (V)	976 (H) x 582 (V)	
Horizontal Resolution	More than 750 TVL		
Sensitivity	0 lux with Invisible* IR on 0.0001 lux native from sensor – no ghosting		
Invisible* IR LEDs	20 LEDs with output at 940 nm *IR Illuminators operating at 940nm cannot be seen by the human eye		
Invisible* IR Range	82 feet or more (depending on scene Invisible IR reflectivity)		
Invisible* IR Switch Points	On at ~1 lux; Off at ~3 lux		
S/N Ratio	Over 50dB (AGC off)		
Video Output	BNC 1.0V p-p 75 $\Omega$ ; video test point inside dome, cable supplied		
Picture Adjust	Gamma 0.45 nominal; adjustable bri	ightness, contrast, saturation, hue and gain	
Lens Type	Varifocal 2.8~12 mm Megapixel DC I	Iris Type	
Positioning	Flexible positioning for wall or ceiling	mounting	
Back Light Compensation	OFF / BLC / HSBLC Selectable		
Auto Gain Control	Low light auto, Bright light auto, Man	ual selectable	
Electronic Shutter	1/60 ~1/100,000 sec.		
White Balance	ATW / One Push / User1 / User2 / Anti	-Color Roll / Manual / Push Lock	
Sync. Mode	Internal (plus Anti-Chroma Crawl White Balance option above)		
Day & Night	True D/N with motorized Invisible IR cut filter; Choose Color, B/W, Auto		
OSD Menu	Multiple functions		
OSD Languages	English, Spanish, Portuguese, German, Russian, Japanese, Chinese, French		
2D-DNR	On/Off (level adjustable)		
Adaptive Tone Curve Reproduction/ Electronic WDR (ATR)	On/Off (3 levels each adjustable for luminance and contrast)		
Mirror	Off/On		
Motion Detection	Off/On for 4 selectable zones (On screen indication on alarm)		
Privacy Mask	Off/On for 4 selectable zones		
Power Source	12V DC / 24V AC		
Power Consumption	12V DC: max. 360mA / 24V AC: max. 4.9W		
Operating Temperature	-40 °F ~ 122 °F (-40 °C ~ 50 °C)		
Storage Temperature	-4 °F ~ 140 °F (-20 °C ~ 60°C)		
Environmental	IP66 (Weather Resistant)		
Mechanical	Metal housing with sun shield; rear weather sealed rear access port for OSD menu and video test point		
Dimensions	Body alone (across sunshield); 3.23" diameter/5.12" long; 8.72" in line, longest extension; in 90° position, ~8.25" long and ~5.4" high		
Weight	1.55 lbs (0.7 kg)		
Certifications	CE / FCC / ROHS		
Warranty	5 years		
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		



www.ktncusa.com





# Resolution



#### KPC-IRBULLET30

Resolution 960 Series 750+HTVL IR True D/N Dual Voltage IP66 Bullet Camera

- Superlative resolution of over 750 horizontal TV lines for amazing image quality
- 960H CCD II for high sensor IR sensitivity
- Varifocal 2.8~12mm DC iris lens to capture the desired field of view
- True Day/Night zero light operating range of 80 feet or more from 20 IR LEDs\*
- Reflection preventing dual section cover glass isolates IR emitters from lens to prevent image distortion
- Simple and easy to use OSD setup menu
  - Adaptive Tone Curve Reproduction (ATR)/Electronic Wide Dynamic Range to properly expose images during unbalanced light contrast in the scene
  - Anti Color Roll white balance option resists fluorescent light interference
  - Optional Back Light Compensation (BLC) and Highlight Compensation (HLC)
  - Adjustable 2D-Noise Reduction to increase picture clarity and improve utilization of DVR disk storage
  - Privacy image masking for 4 configurable zones
- Dual voltage (12VDC/24VAC) with Anti Color Roll
- IP66 weather resistant
- External lens adjustment and service Video output for convenient installation, and ease of service
- Extreme Operating temperature down to -40 degrees
- 3-axis bracket conceals and protects cable



#### Technical Specifications

Imaging Device	1/3" 960H High Sensitivity CCD
Video Format	NTSC -or- PAL (separate models)
Picture Elements	NTSC: 1020(H)x508(V) PAL:1020(H)x596(V)
Effective Picture Elements	NTSC: 976(H) x 494(V) PAL:976(H) x 582(V)
Horizontal Resolution	More than 750 TVL
Lens Type	Varifocal 2.8~12mm Megapixel DC Iris Type
Sensitivity	0 lux with Smart IR; 0.001 lux native from sensor – no ghosting
Smart IR LEDs	20 LEDs with output at 850nm
Smart IR Range	100 feet or more (depending on scene IR reflectivity)
Smart IR Switch Points	On at ~1 lux; Off at ~3 lux
S/N Ratio	Over 50dB (AGC off)
Video Output	BNC 1.0V p-p $75\Omega$ ; video test point inside dome, cable supplied
OSD Menu	Multiple functions
OSD Languages	English, Spanish, Portuguese, German, Russian, Japanese, Chinese, French
Picture Adjust	Gamma 0.45 nominal; adjustable brightness, contrast, saturation, hue and gain.
Day/Night	True D/N with motorized IR cut filter; Choose Color, B/W, Auto
Digital WDR	Off/On level adjustable
Back Light Compensation	OFF/On with Selectable area and level
Highlight Compensation	OFF/On with Selectable area and level
Auto Gain Control	Off/Low/Mid/High
Electronic Shutter	1/60 ~1/100,000 sec.
Gamma	0.45 nominal; adjustable for indoor/outdoor/manual color temperature and red/
Gamma	blue levels
White Balance	ATW/AWC Set/Anti-Color Roll/Manual
Sync. Mode	Internal (plus Anti-Chroma Crawl White Balance option above)
2D-DNR	Off/On level adjustable
Horizontal Mirror	Off/On
Motion Detection	Off/On for 4 selectable zones (On screen indication on alarm)
Privacy Mask	Off/On for 8 selectable zones
Lens Shading Compensation	Off/On with selectable level and center point
Defective Pixel Compensation	Manual, with area and threshold settings
Display Optimization	Choose CRT/LDC, with selectable color levels
Power Source	12VDC/24VAC
Power Consumption	12VDC:360mA max. / 24VAC:4.9W max.
Operating Temperature	-40°F~140°F; -40°C~60°C
Storage Temperature	-40°F~140°F:-40°C~60°C
Environmental	IP66 weather resistant
Positioning	Flexible positioning for wall or ceiling mounting
Mechanical	Metal housing with sun shield; rear weather sealed rear access port for OSD
Medianical	menu and video test point
Dimensions	Body alone (across sunshield): 3.23" diameter/5.71" long; 8.82" in line, longest
Diffici iolorio	extension; in 90° position, ~8.25" long and ~5.4" high
Weight	1.98 pounds / .9 kg.
Certifications	CE / FCC / ROHS
Warranty	5 years
wanding	o years