EX1000 SERIES
IR Laser Starlight HD PTZ IP Camera

EX1020BHDG-L5NAP1

**KEY FEATURES**

- Min. Illumination: 0.002 Lux in color
- IP Resolution: Up to 1080P60
- Zoom: 20X 16X Digital Zoom
- Video Output: IP
- Environmental: IP67
- Power: AC 24V, POE(IEEE 802.3 bt)
- ONVIF Compliant

**DESIGN**

- Double sided coating on optical glass with dust and water resistant properties.
- High definition coating to allow increased penetration of light.
- IP67 rating for protection against moisture and dust
- Corrosion resistant treated housing for salt spray environment use.
- Nitrogen filled housing ensures moisture free air inside the camera housing and provides added protection against effects of condensation due to harsh environments.
- Adaptive IR Laser illumination with intelligent sensors to auto adjust for lighting conditions to output optimal image quality.
- Distance up to 500 meters.
- Hardened metal alloy casing shape are ideal for extreme weather condition use.
- Resistance to high wind, wind load durability: 60m/s.
- Extra vertical 30° tilt angle gives greater view of upper area.
- Built in Pressure Equalization to protect internal components and motor performance under extreme conditions.
- Stainless steel ball bearing assembly to provide extended life with minimized corrosion.
- Water resistance with waterproof shaft and oil seal with stainless steel structure.
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- Stainless steel ball bearing assembly to provide extended life with minimized corrosion.
- Water resistance with waterproof shaft and oil seal with stainless steel structure.
- **FUNCTIONALITY**

- Bolin Starlight IP PTZ camera provides great color image at night in low light environment. Min. Illumination: 0.002 lux in color
- IP video resolution supports up to 1080p60
- Video Output: IP (H.264/H.265), Triple video streaming.
- True WDR: 120dB
- IR Laser Illumination: 500 meters Adaptive
- 360 degree pan and 120 degree tilt range of movement with extreme slow and quiet and smooth speed adjustable PTZ control.
- Adaptive speed 0.1°~80°/s, 255 Presets, Speed: 80°/s, 8 Cruises, 3D Positioning
- Design for extreme weather use: IP67 rating for outdoor use.
- Corrosion Resistant treated housing for salt spray environment.
  Wind Load Durability: 60m/s, Nitrogen Filled Housing, -40°C to +60°C operating temperature.

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# Product Specification

## Model No.
**EX1020BHDG-L5NAP1**

### Camera
- **Model No.**: EX1020BHDG-L5NAP1
- **Image Sensor**: 1/2.8" CMOS, 2MP
- **Lens**: 20X, 6.7~134mm, 16X Digital Zoom
- **Horizontal Angle of View**: 58°(W)~3.9°(T)
- **Aperture**: F1.5(W)~F3.4(T)
- **Min. Illumination**: 0.002 lux(F1.6, AGC ON, Color), 0.0002 lux(F1.6, AGC ON, B/W)
- **Shutter Speed**: 1/6~1/8000s
- **Focus**: Auto, Push
- **White Balance**: Auto, Manual
- **Exposure**: Auto, Manual, Shutter/Iris Priority
- **Day/Night**: YES
- **Backlight Compensation**: YES
- **WDR**: YES, 120db
- **Privacy Zone Masking**: YES
- **Defog**: YES
- **Motion Detection**: YES, 4 Zones
- **Noise Reduction**: 2D/3D
- **S/N Ratio**: ≥50db

### Mechanical
- **Pan Movement**: Horizontal: ±360° continuous pan (Zoom Adaptive Speed Range: 0.1°~80°/s)
- **Tilt Movement**: Vertical:+90° to -15° (Zoom Adaptive Speed Range: 0.1°~90°/s)
- **Preset Position**: 255 (Preset Speed: 80°/s)
- **Home Position**: YES
- **Cruise**: YES
- **Environmental**: Outdoor, IP67, Corrosion Resistant Treated Housing, Wind Load Durability: 60m/s, Nitrogen Filled Housing
- **Illumination**: IR Laser. The adaptive IR Laser can be synchronized with different zoom angle. Illumination distance is up to 500 Meters.

### Network
- **Video Compression**: MJPEG, H.264, H.265
- **Resolution/Frame Rate**: 1080p: 60/50/30/25fps; 720p:30/25fps
- **Protocols**: L2TP, IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, QoS, DNS, DDNS, NTP, FTP, UPnP, HTTP, SNMP, SIP
- **Multi-stream**: 3 data stream function will satisfy various bandwidth, frame rates and storage requirements in real time
- **Audio Compression**: AAC-LC Broadband Audio Encoding
- **OSD**: Customized OSD
- **Compatible Integration**: ONVIF 2.4

### Interface
- **Network**: 10M/100M/1000M Base-TX Ethernet, RJ45
- **Video**: Analog (Tail-Cable A) 1XBNC
- **Audio I/O (Tail-Cable A)**: Input: Impedance 35kΩ, Amplitude 2V [p-p]; Output: Impedance 600kΩ, Amplitude 2V [p-p]
- **Alarm I/O (Tail-Cable A)**: Alarm Input X1, Alarm Output 1X1
- **Control (Tail-Cable A)**: RS485 (Not Activated)
- **Edge Storage**: Micro SD, Up to 128GB (Optional)

### General
- **Operating Temperature**: -40 to +60
- **Operating Humidity**: 100% Suitable for Use
- **Power Input**: AC 24V, DC±24V, PoE (Compatible with IEEE802.3bt), (Bolin PoE 97W High Power POE Injector recommended, Optional)
- **Power Consumption**: Min: 23W (Static state with no movement); Max: 50W (Fully loaded operation with heater and IR Laser on)
- **Dimension**: Φ183×428mm
- **Weight**: 10.5kg

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**ORDER INFORMATION**

- EX1020BHDG-L5NAP1 (IP, Nitrogen Filled)
- Bolin 97W High Power POE Injector sold seperately. Model number: BL-PP97
- Wall Mount: EX1000-WM  
  Base Mount: EX1000-MB  
  Ceiling Mount: BL-EX-CMS, BL-SD-CMS

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All models and specifications are subject to change without notice.