

- BC-7-4K20S-S3MNB
- BC-7-4K20S-S6MNB

KEY FEATURES



- Sony 1/2.5" CMOS 8.5 Megapixels
- Optical Zoom 20X, Up to 30X in 4K and 40X in Full HD with SRZ(Super Resolution Zoom) feature
- Video Resolution: Up to 4K 2160p29.97, 1080i59.94, 1080p60
- IP Video Resolution: Up to 2160p30, 1080p60
- Video Output: Simultaneous 6G-SDI/3G-SDI, 4K HDMI, 4K IP, HDBaseT
- H.264/265 IP video stream, RTMP live streaming.
- Black Level, Color Matrix, Image Stabilizer, True WDR
- HTML5 Cross Browser compatibility
- Power: DC 12V, POE, HDBaseT POH(IEEE802.3bt)
- RTMP, SRT supported



OVERVIEW

Ideal for Broadcast TV, Videoconferencing, House of worship, Live sports and events, Educational environment, Corporate training, Large auditoriums. Distance learning, Courtrooms, sports stadiums and Telemedicine applications.

BC Series is Bolin first 4K PTZ camera designed for broadcast application use quipped with SONY 4K image block brilliant broadcast-quality Super-High-Resolution color image in 4K30 with excellent low-light sensitivity and full HD footage can also be captured at up to 1080p60, which is optimal for capturing fast, spontaneous action.

SRZ - Super-Resolution-Zoom expands zoom range to 30X zoom at 4K, or 40X zoom at FHD without sacrificing detail.

TRUE Dual Output PTZ camera provides simultaneous 6G/3G-SDI and remote 4k IP video streaming and control. It is a TRUE Dual Output PTZ where SDI and IP formats can be set independently.

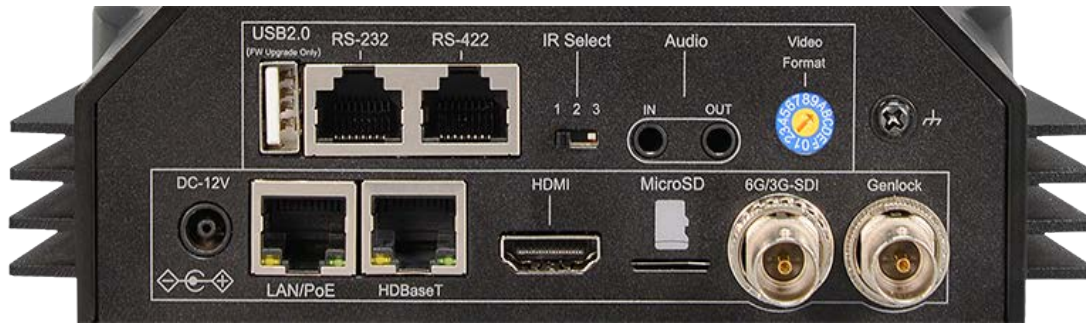
Comprehensive image parameter settings (Black Level, Color Matrix and Trace Memory) and Tally lights for Broadcast-friendly use and Pro AV applications.

Extremely quiet and smooth Pan/Tilt movements combined with enhanced adaptive variable and super slow speed control provides accurate and effective operation experiences.

License Upgradable from FHD to 4K. Not ready for 4K? Have easy of mind to own a 1 inch CMOS FHD camera first, upgrade to 4K when you need it. Your investment is protected.



FEATURES



Uncompromising 4K images

Equipped with Sony 4K image block with Bolin FPGA video processing which delivers an uncompromised broadcast quality 10bit color pictures in detail-packed 4K/30p. Also the footage can be captured in Full HD 60p for fast-moving action applications. Excellent low light sensitivity brings low noise color video images in low light levels as low as 0.4lx, making it an ideal choice for low light environment like live hall and theater.

Image Stabilizer

Bolin camera's built-in image stabilizer function eliminates the effect of blurred, shaky images caused by low-frequency vibration.

Versatile Video Outputs

Flexibility in professional broadcast and AV environments with multiple choices of video outputs:

- * 4K HDMI and 6G-SDI(3G-SDI) and HDBaseT
- * 4K IP streaming and RTMP live streaming, HTML5 Cross Browser compatibility

SRT Ready

Delivery of high-quality and secure, low-latency video across the public Internet. SRT optimizes streaming performance across unpredictable networks with secure streams and easy firewall traversal, bringing the best quality live video over unstable networks.

Video Format

The camera video format satisfies application for Pro AV and broadcast use

- * HDMI/SDI format up to 4K 2160p29.97, 1080i59.94, 1080p60
- * IP video format up to 2160p30, 1080p60.
- * Supports cinematic 23.98/24p pictures

Control

The camera provides multiple methods of controlling, which gives you capabilities of local control and remote control without distance limitations.

- * RS232, RS422/485, IP, HDBaseT, IR remote controller.
- * Protocol supported: VISCA, VISCA-Over-IP, PELCO D, IP Onvif, HDBaseT one cable control + video.

Flexible Installation

Installation is simplified in a wide range of environments via:

- * RJ45 RS232/422 control port provides convenience of wiring.
- * PoE and POH (Power over HDBaseT) to reduce cabling requirements.
- * Standard and ceiling mount and tripod with E-Flip function.

Always Up to Date

Always up to date, Download the latest Firmware upgrade via USB and IP interface which constantly improves the camera features and performance, even for customized function upgrades.

Other Features

- * Picture Profile Preset- Image parameter setting restore with presets and quick access operation.
- * Genlock simplifies integration with other systems.
- * Audio output Embedded with SDI and HDMI



HDBaseT Receiver (Optional)



VCC-4K-BR Back



VCC-4K-BR Front

Product Specification

Model No.	BC-7-4K20S-S3MNB	BC-7-4K20S-S6MNB
	License Upgradable From FHD to 4K	
Camera	20X 4K	
Image Sensor	1/2.5" CMOS	
Number of effective pixels	8.5 Megapixels	
Picture elements	3840 x 2160	
Lens	Optical Zoom 20X, Up to 30X in 4K and 40X in Full HD with SRZ(Super Resolution Zoom) feature	
Tele Convert Mode	When turn on, gain 2X-40X zoom range with 1080p resolution, up to 80X with SRZ	
Digital Zoom	Digital Zoom 12X	
Horizontal Angle of View	70.2°(W)~4.1°(T)	
Focal Length	4.4mm(Wide)-88.4mm(Tele)	
Min. object distance	80mm (Wide), 1000mm (Tele)	
Aperture	F2.0(W)~F3.8(T)	
Min. Illumination	0.4lux (1/30s, 50%, High Sensitivity mode On), 1.6lux (1/30s, 50%, High Sensitivity mode Off), 0.06lux(1/4s(1/3s),50%, High Sensitivity mode On), 0.21lux(1/4s(1/3s),50%, High Sensitivity mode Off)	
Shutter Speed	1/1~1/10000s (22 steps)	
Focus	Auto Focus(Trigger/Interval), Manual Focus(Variable Speed), One Push Trigger, Near Limit,	
White Balance	AUTO, ATW, Indoor, Outdoor, One Push WB, Manual WB, Outdoor Auto, Sodium Vapor Lamp (Fix/Auto/Outdoor Auto)	
Exposure	Full Auto, Gain, Shutter Priority, Iris Priority, Manual, Bright	
Features	High Sensitivity, Backlight Compensation, HLC, E-FLIP, Mirror, Day/Night	
WDR	YES(130dB)	
ND Filter	-	
Image Stabilizer	YES	
Color Gain	Yes (15 step)	
Color Hue	Yes (15 step)	
Gamma	Standard/Straight/Pattern	
Gamma Level	Yes (15 step)	
Black Level	Yes (97 step)	
Black Gamma	Yes (15 step)	
Color Matrix	Off/Standard/High Saturation/FL light	
Noise Reduction	On/Off (level 5 to 1 / Off, 6 steps), 2D/3D	
S/N Ratio	≥50db	
Mechanical		
Pan Movement	Horizontal:±175 degrees continuous pan (Zoom Adaptive Speed Range: 0.05°~100°/S)	
Tilt Movement	Vertical:+90 degrees to -30 degrees (Zoom Adaptive Speed Range: 0.05°~50°/S)	
Preset Position	128 (Speed adjustable: Up to 150°/S, 6 presets on remote controller.)	
Preset Speed	0~5 Level Adjustable, Motionless preset	
Preset Memory	YES, (Picture Profile Preset-Preset Memory for image parameters, like: Backlight Compensation, White Balance, R-Gain/B-Gain, Auto Exposure, Bright, Iris, Shutter, Gain, Aperture, Effect, Noise Reduction, Mirror, Gamma, Ex-COMP, Color Hue, Contrast etc.)	
PTZ Trace Memory	12 (Supported via IP interface)	
PTZ Motion Sync	-	
Quietness	49db	
Home Position	Support	
Environmental	Indoor	
Interface		
Video Output	3G-SDIX1, HDMI(1.4)X, IP, HDBaseT	6G-SDIX1(3G-SDI supported), HDMI(1.4)X, IP, HDBaseT
4K Video Output	-	Main 4K HDMI 1.4a Type-A X1
	-	6G-SDIX1
	-	4K IP H.265/264
HD Video Output	HD HDMIX1 3G-SDIX1	
Color Precision	10bit(SDI), 8bit(HDMI), YCbCr, 4:2:2	
Color Space	YUV	
IP Video Stream	Up to 4K/30 and 1080p60	
Camera Control Interface	RJ45X2-RS232/RS-422/RS485, RJ45X1-IP Control, RJ45X1-HDBaseT, IR Remote Control	
Control Protocol	VISCA, VISCA Over IP, Pelco D, IP Onvif, IP Control Client Software, NDI(Model Specific)	
LAN	RJ45X1(1000Mb), 4K IP video streaming, System upgrade, POE(IEEE802.3bt)	
Synchronization	Internal synchronization	
External Sync. Input	Genlock, BNCX1, 75Ω, BBS (Black Burst Sync), tri-level sync supported	
Audio I/O	Audio input x1, Audio output x1, 3.5mm audio jack	
Audio Output	Embedded with main HDMI, 24bit Stereo, Embedded with SDI, 24bit Stereo	
HDBaseT	Yes, Runs FHD/4K video, control(RS232/422/485/IR Remote), power, audio, IP(Video streaming+control) on one CAT6 cable up to 80-100meters.	
Edge Storage (Beta)	Micro SD, Class 10, FAT32 format, Up to 128GB	
Tally Light	Two color lamp in front	
Dip Switch	Bottom Dip Switch: 8 PIN x 1; Rear Panel Video Resolution Dip X1	

Product Specification

System Firmware Upgrade	Upgrade for camera system and FPGA Via USB2.0 (for FW upgrade only), via IP(for encoder and FPGA)
Power Connector Type	External Power adaptor: IEC60130-10 (JEITA standard RC-5320A) TYPE4 RJ45: POE((IEEE802.3bt)) RJ45: POH((Power Over HDBaseT))
Optional Card Slots	-

Signal System

Video Format	1920 x 1080/59.94p/60p (HDMI, SDI) 1920 x 1080/59.94i/60i (HDMI, SDI) 1920 x 1080/50p (HDMI, SDI) 1920 x 1080/50i (HDMI, SDI) 1920 x 1080/29.97p/30p (HDMI, SDI) 1920 x 1080/25p (HDMI, SDI) 1920 x 1080/23.98p/24p (HDMI, SDI) 1280 x 720/59.94p/60p (HDMI, SDI) 1280 x 720/50p (HDMI, SDI)	3840 x 2160/29.97p (HDMI, SDI) 3840 x 2160/25p (HDMI, SDI) 3840 x 2160/23.98p (HDMI, SDI) 3840 x 2160/24p (HDMI, SDI) 1920 x 1080/59.94p/60p (HDMI, SDI) 1920 x 1080/59.94i/60i (HDMI, SDI) 1920 x 1080/50p (HDMI, SDI) 1920 x 1080/50i (HDMI, SDI) 1920 x 1080/29.97p/30p (HDMI, SDI) 1920 x 1080/25p (HDMI, SDI) 1920 x 1080/23.98p/24p (HDMI, SDI) 1280 x 720/59.94p/60p (HDMI, SDI) 1280 x 720/50p (HDMI, SDI)
Standard	SMPTE 292(1.5Gb/s), SMPTE 424, SMPTE 425-A(3Gb/s), SMPTE 2081 With SMPTE352 SDI Metadata Supported	

Network

Video Compression	MJPEG,H.264/H.265
IP Video Format	True Dual Output : IP format can be set independently of SDI video format 1920x1080p60/50/30/25/24, 1280x720p60/50 3840x2160p30/25/24, 1920x1080p60/50/30/25/24, 1280x720p60/50
Protocols	TCP/IP, ICMP, ARP, RTP, SIP, UDP, HTTP, DNS, DHCP, FTP, NTP, RTMP, RTSP, SRT
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(Duplex Communicate Supported, Audio/Video synchronization)
OSD	Customized OSD, Support custom LOGO insert
Compatible Integration	ONVIF2.4, VISCA Over IP
Browser Support	Cross Browser Compatibility - HTML5 support for Microsoft Edge, Google Chrome, Firefox, and Safari

General

Body Color	Black, White
Mount	Ceiling mount, Wall mount, Tripot
Size of Screw Hole for Tripod	1/4-20UNC x2
Operating Temperature	-10 to +40 (°C), 32 to 104 (°F)
Operating Humidity	≤80% Suitable for Use
Power Input	12VDC, POE++(IEEE 802.3bt, Type 4, class 8 required), POH(Power Over HDBaseT, IEEE 802.3bt)
Power Consumption	Min: 22W(Static state with no movement); Max: 38W (Fully loaded operation)
Dimension	142x159x217mm
Weight	2.7kg
Body Color	Black, White
HDBaseT Receiver	* Optional, Sold Separately

Model No.	BL-BR4K-1
Input	1XRJ45-HDBaseT
Output	1XHDMI Type A - HDMI 1.4b, 1XRJ45- IP Pass-Thru (100Mbps, extend connection only, not IP encoder)
Power Input	DC54V, 2.77A
Power Output	POH(Power Over HDBaseT), Power over one CAT6 network cable
Power Consumption	Up to 97W
Control Interface	2XRJ45-RS232/ RJ45-RS422/RS485, IR Control Sensor
IR IN Control Interface	3.5mm 3.5-5v TTL
Audio Output	3.5mm Jack
Dimension	164x118x33mm
Weight	0.52KG

ORDER INFORMATION

- BC-7-4K20S-S3MNB/B (Black)
- BC-7-4K20S-S6MNB/B (Black)
- BC-7-4K20S-LS-4K (License for 4K upgrade)
- BC-7-4K20S-S3MNB/W (White)
- BC-7-4K20S-S6MNB/W (White)
- BL-BR4K-1 (HDBaseT Receiver, sold separately)
- Bolin 97W High Power POE Injector sold separately. Model number:BL-PP97
- VCC-CC45232 (RJ45 to RS232 8 Pin Mini Din Cable Adapter)
- VCC-CC45RS (RJ45 to RS422/232 Cable Adapter)
- VCC-WM (Wall Mount)
- VCC-CM (Ceiling Mount)