

HD VIDEO CONFERENCING CAMERA

HD Video Conferencing Camera

Technical reference for the BR-VC20XH — a 1080P conferencing PTZ camera with a 20× optical-zoom super-telephoto lens, AI presenter tracking, up to 60 fps output, and USB3.0 / HDMI / 3G-SDI / IP connectivity.

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01 · CONFERENCING CAMERA

HD Video Conferencing Camera

1080P PTZ camera with a 20× optical-zoom super-telephoto lens, AI tracking and up to 60 fps output.

Built for meeting rooms and broadcast, the BR-VC20XH pairs a 1/2.8-inch CMOS sensor with a 20× optical zoom and AI individual, presenter and group tracking. Frame rate reaches up to 60 fps at 1080p, with USB3.0, HDMI, 3G-SDI and IP output available at the same time.



OPTICAL ZOOM

20× +16× dig

FRAME RATE

60 fps @1080p

TRACKING

AI indiv / group

SENSOR

1/2.8" 2.07 MP

HEADLINE CAPABILITIES

- 20× optical + 16× digital zoom
- AI individual, presenter & group tracking
- H.265 low-bandwidth streaming
- Up to 60 fps in 1080p
- USB3.0 + HDMI + 3G-SDI + IP together
- PoE+ local USB recording

01.1 Features

IMAGING · AI · CONNECTIVITY

- 20× optical + 16× digital zoom with a high-quality super-telephoto lens.
- Low-light high-SNR CMOS with 2D & 3D noise reduction keeps the image clean.
- 1080P full HD — 1/2.8-inch, 2.07 MP CMOS sensor, up to 1920×1080.
- AAC audio encoding — better sound quality at smaller bandwidth.
- AI tracking for individual / presenter and group-track modes.
- Dual built-in microphones with 3.5mm line-in / line-out.
- Full NDI support, backward-compatible with NDI|HX2 (optional feature).
- Remote control via RS-232 and RS-485 — every parameter controllable remotely.
- H.264 / H.265 delivers full HD 1080P at low bandwidth.
- Power over Ethernet (PoE+, 802.3at) or DC 12V.

02.1 Optics & Imaging

SENSOR · LENS · IMAGE

Sensor	1/2.8-inch CMOS, 2.07 MP effective
Lens	20×, f = 4.42 – 88.5mm, F1.8 – F2.8
Digital zoom	16×
Scanning mode	Progressive
White balance	Auto · Indoor · Outdoor · One-Push · Manual · VAR
Backlight compensation (BLC)	Support
Video S/N	≥ 55 dB
Shutter	1/30s – 1/10000s
Minimum illumination	0.5 Lux @ F1.8, AGC ON
Digital noise reduction	2D & 3D DNR

02.2 Pan / Tilt / Zoom

MOVEMENT · PRESETS · SIGNAL

Pan speed range	1.7° – 100°/s
Tilt speed range	1.7° – 69.9°/s
Horizontal rotation (pan angle)	±170°
Vertical rotation (tilt angle)	-30° – +90°
H & V flip / image freeze	Support
Number of presets	255
Preset accuracy	0.1°
Horizontal angle of view	60.7° – 3.36°
Vertical angle of view	34.1° – 1.89°
Video system	HDMI, 3G-SDI: 1080P60, 1080P59.94, 1080P50, 1080I60, 1080I59.94, 1080I50, 1080P30, 1080P29.97, 1080P25, 720P60, 720P59.94, 720P50

03.1 Video & Streaming

CODEC · STREAMS · BITRATE

Video stream	First stream + second stream
First stream resolution	1920×1080, 1280×720, 1024×576, etc.
Second stream resolution	1280×720, 1024×576, 720×576, etc.
Frame rate	1fps – 60fps
Video compression	H.264 / H.265 / MJPEG
Video bit rate	32Kbps – 20480Kbps
Bit-rate type	VBR, CBR
Audio compression	AAC
Audio bit rate	96 / 128 / 256 Kbps

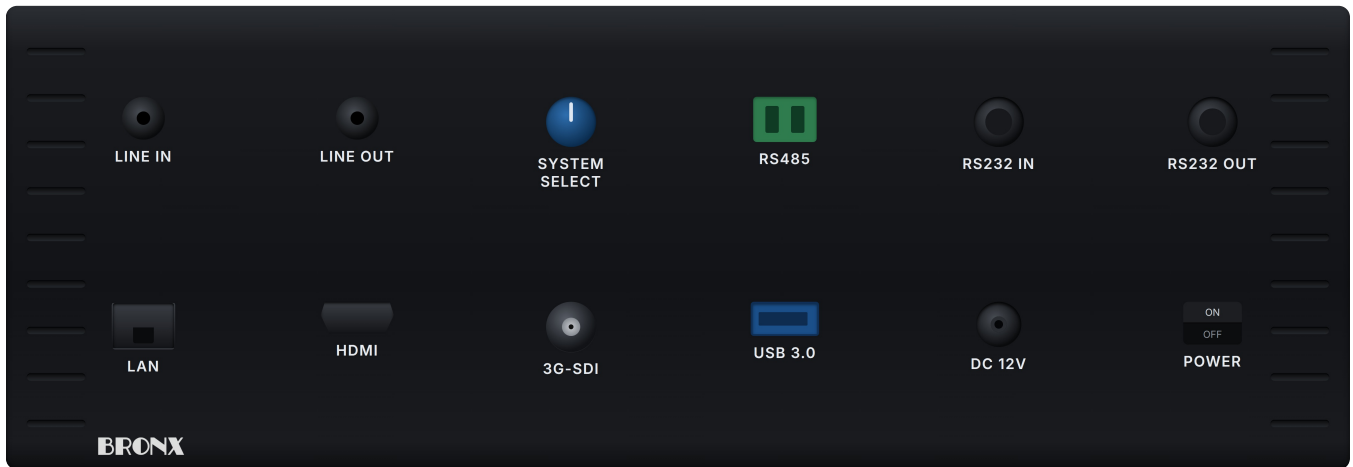
03.2 IPC & USB Features

PROTOCOLS · USB

Support protocols	Full NDI, NDI HX2, TCP/IP, HTTP, RTSP, RTMP, RTMP(s), Onvif, DHCP, Multicast, SRT, etc.
USB operating systems	Windows 7 (UVC1.1 features only), Windows 8 and above, Mac OS X, Linux 2.4.6 and above; Android requires a UVC-compatible driver build
USB colour system / compression	YUY2 / H.264 / MJPEG
USB 3.0 video format	Up to 1080p60 YUY2 output
USB audio	32K sampling rate, UAC2.0 supported
USB Video Class (UVC)	UVC 1.1 ~ 1.5
UVC PTZ control	Support

04.1 Rear Panel

AUDIO · VIDEO · CONTROL · POWER



BR-VC20XH rear panel — audio line in/out, system select, RS-485 / RS-232, LAN, HDMI, 3G-SDI, USB 3.0 and DC 12V power.

04.2 Interfaces & Control

VIDEO · AUDIO · CONTROL

HD output	1× HDMI: Version 1.3 · 1× 3G-SDI: BNC, 800mVp-p, 75Ω, per SMPTE 424M standard
Network interface	1× RJ45, 1000M (Gigabit) Ethernet
Audio interface	1× Line In, 3.5mm jack · 1× Line Out, 3.5mm jack
USB	1× USB 3.0
Control interface	1× RS-485: 2-pin Phoenix, ≤1200m, VISCA / Pelco-D / Pelco-P · 1× RS-232 IN & 1× RS-232 OUT: 8-pin Mini-DIN, ≤30m, VISCA / Pelco-D / Pelco-P (RS-232 OUT: VISCA only)
Power jack	JEITA type (DC IN 12V)

04.3 Generic Specification

ELECTRICAL · PHYSICAL

Input voltage	DC 12V / PoE+ (802.3at)
Input current	1.5A (Max.)
Power consumption	15W (Max.)
Operating temperature	0°C – 40°C
Storage temperature	-40°C – 60°C
Size (W × D × H)	142 × 169 × 175mm
Net weight	1.5kg

Disclaimer: due to continuous product development, specifications and product images may change without prior notice. Full NDI is an optional feature (25-minute free trial per power-on; full licence required for continued use). Certain protocols and interfaces may be optional configurations — confirm the exact build with your Bronx sales contact.