



BG-IPGEAR-XTREME

4K UHD HDMI 2.1 AV OVER IP MULTICAST
TRANSCIVER WITH SEAMLESS MATRIX
SWITCHING/MULTIVIEW/KVM/USB 3.2 & POE
SUPPORT OVER 1 GIGABIT NETWORK

The BG-IPGEAR-XTREME delivers next-generation HDMI 2.1 over IP performance, enabling uncompressed 4K@120Hz 4:4:4 video, multi-channel audio, and advanced KVM functionality over standard Cat.5e/6 cabling up to 100 meters. Designed for professional AV environments, this versatile transceiver can operate as either a transmitter or receiver, supporting point-to-point, point-to-multipoint, and multicast configurations for maximum deployment flexibility. With seamless matrix switching, ultra-low latency transmission, and scalable network architecture, the system is ideal for digital signage, esports, corporate AV, broadcast, education, healthcare, and command center applications.

Supporting HDR10, HDR10+, Dolby Vision, VRR, and ALLM, the BG-IPGEAR-XTREME ensures exceptional image quality with smooth, tear-free performance for both live and interactive content. Integrated USB 3.1 Gen1/Gen2, bi-directional IR, and RS-232 provide full KVM extension and reliable third-party control integration, while PoE support simplifies installation by delivering power, video, audio, and control over a single Ethernet cable.



FEATURES



HDMI 2.1 & HDCP 2.3 COMPLIANCE

Ensures compatibility with the latest high-definition content protection standards



4K@120HZ 4:4:4 VIDEO TRANSMISSION

Provides ultra-high-definition video with crystal-clear clarity and exceptional color depth



VRR (VARIABLE REFRESH RATE) & ALLM (AUTO LOW LATENCY MODE)

Enhances gaming and interactive applications with smooth frame rates and reduced latency



LONG-DISTANCE TRANSMISSION

Extends HDMI signals up to 100m (330ft) over Cat.5e cabling



ADVANCED AUDIO SUPPORT

Delivers uncompressed 7.1-channel digital HDMI audio, including DTS-HD Master Audio and Dolby TrueHD



INTELLIGENT NETWORK MANAGEMENT

Works with managed 1GbE switches supporting IGMP Snooping & 802.1Q VLAN for multicast optimization



TECH SPECIFICATIONS

Technical

HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	up to FRL 5 (40G)
Video Support	up to 4K@120 4:4:4
HDMI over UTP	4K@120 4:4:4 100m (330ft) [CAT.5E]
Audio Support	Surround sound [up to 7.1ch]
Equalization	Auto
Input TMDS Signal	1.2 Volts [peak-to-peak]
Input DDC Signal	5 Volts [peak-to-peak, TTL]
ESD Protection	Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]
PCB Stack-up	6-layer board [impedance control — differential 100Ω; single 50Ω]
IR Pass-thru	Bi-directional
RS-232 Support	Yes
Input	1x HDMI, 1x 3.5mm, 1x USB, 1x USB-C
Output	1x 3.5mm, 1x RJ-45
I/O	1x terminal block (RS-232)
HDMI Source Control	Controllable via IR pass-through from RX to TX or TX to RX with IR extenders
HDMI Connector	Type A [19-pin female]
RJ-45 Connector	WE/SS 8P8C (Reverse Mode)
USB Connector	Type A / USB-C
3.5mm Connector	IR receiver / IR blaster

Mechanical

Housing	Metal enclosure
Fixedness	Wall-mounting case with screws
Dimensions (LxWxH)	5.2 x 3 x 0.79in [132 x 75 x 20mm]
Weight	1.1 lbs [0.5kg]
Power Supply	12V DC, 1A
Power Consumption	12 Watt [max]
Operation Temperature	32~104°F / 0~40°C
Storage Temperature	-4~140°F / -20~60°C
Relative Humidity	20~90% RH [no condensation]

Limited Product Warranty Terms

Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit bzbgear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

Pro Line Products
5-YEAR WARRANTY
Essential Line Products
3-YEAR WARRANTY
Cables Products
LIFETIME WARRANTY

