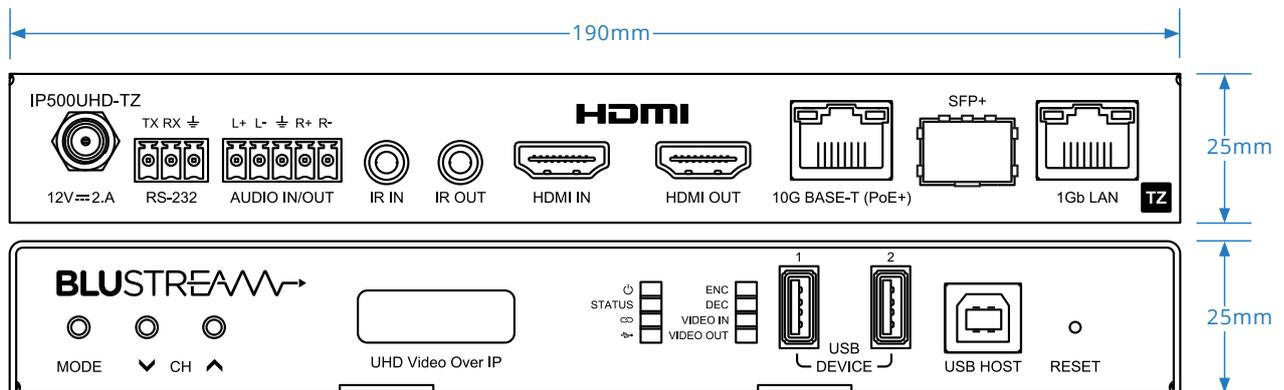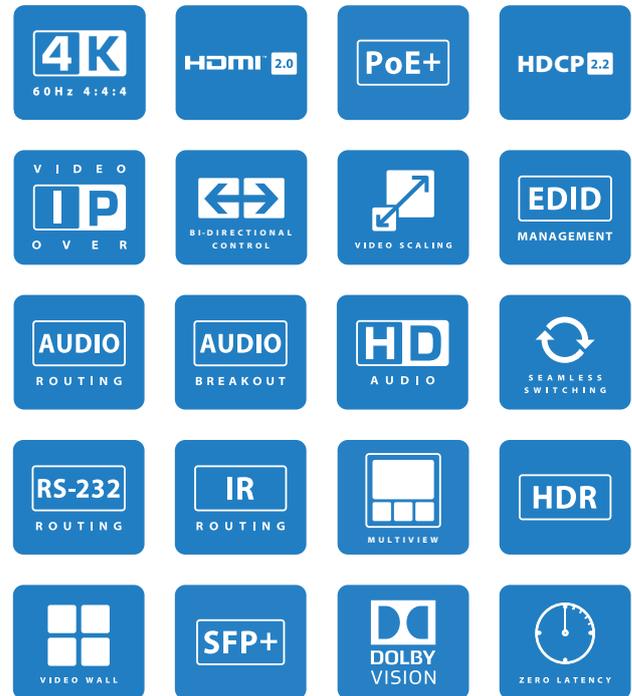# IP500UHD-TZ

BLUSTREAM

Multicast UHD Transceiver

Description

The Blustream IP500UHD-TZ Transceiver is an SDVoE compliant AV over IP solution that provides the highest-quality, uncompromised 4K with zero latency Audio/Video extension over copper or optical fibre 10G networks.

The IP500UHD-TZ includes support for HDMI 2.0 encompassing distribution of HDR (High Dynamic Range), 10-bit colour content and multi-channel HD audio signals. The IP500UHD-TZ provides advanced features including PoE+ and transmission of multiple control and data signals alongside audio and video, including IR, RS-232, USB (KVM) and 1Gb Ethernet.

The IP500UHD-TZ is ideal for 18Gbps HDMI installations where multiple transceivers can be combined with one or more 10GbE copper / fibre switches to form a distributed video matrix, multi-viewer or video wall system.

Feature icons: 4K 60Hz 4:4:4 · HDMI 2.0 · PoE+ · HDCP 2.2 · VIDEO OVER IP · BI-DIRECTIONAL CONTROL · VIDEO SCALING · EDID MANAGEMENT · AUDIO ROUTING · AUDIO BREAKOUT · HD AUDIO · SEAMLESS SWITCHING · RS-232 ROUTING · IR ROUTING · MULTIVIEW · HDR · VIDEO WALL · SFP+ · DOLBY VISION · ZERO LATENCY

Dimensions: 190mm × 25mm × 25mm

Rear panel: IP500UHD-TZ · 12V⎓2.A · TX RX / RS-232 · L+ L- / R+ R- AUDIO IN/OUT · IR IN · IR OUT · HDMI IN · HDMI OUT · 10G BASE-T (PoE+) · SFP+ · 1Gb LAN · TZ

Front panel: BLUSTREAM · MODE · CH · UHD Video Over IP · STATUS / ENC DEC VIDEO IN VIDEO OUT · 1 2 USB DEVICE · USB HOST · RESET

Key Features

- Advanced 18Gbps UHD Video over 10Gb network with uncompromised video quality and zero latency
- Supports HDMI 2.0 18Gbps specification with pass-through for up to 4K 60Hz 4:4:4 and 10/12-bit HDR sources, including Dolby Vision LLM (Low Latency) up to 12-bit
- Supports video scaling and single-frame switching
- Supports all known digital HDMI audio formats including Dolby TrueHD, Atmos, DTS-HD Master Audio and DTS:X transmissions
- Support fixed signal routing function for IR, RS-232, CEC and USB
- USB end to end/point to point pass-through
- Analogue L/R audio embedding and audio breakout (balanced and unbalanced)

- Bi-directional 10/100/1000BaseT Ethernet pass-through
- Supports bi-directional 5V or 12V IR pass-through
- PoE (Power over Ethernet) to power Blustream products from PoE+ switch
- HDCP 2.2 compliant with advanced EDID management
- Local 12V 2.5A power supply (should Ethernet switch not support PoE+) (power supply sold seperately)
- Features 4 operational modes:
    - Matrix distribution (requires 10Gb network switch)
    - Video wall (requires 10Gb network switch)
    - Multiview mode (requires 10Gb network switch)
    - One-to-one HDMI extender (no network switch required)

BLUSTREAM · SDVoE ALLIANCE · HDMI · HDBT · Dante · Dolby · dts

Connectivity

- **Video Input:** 1x HDMI Type A, female
- **Video Output:** 1x HDMI Type A, female
- **Latency:** 100 microseconds (0.1ms) with no video compression (<16ms with mild video compression - 10-18Gbps HDMI signals)
- **Audio Input / Output Connector :** 1x 5-Pin Phoenix connector
- **Ethernet Port:** 1x 10GBaseT RJ45 video network, 1x SFP+ module video network, 1x 1Gb LAN RJ45 pass-through
- **RS-232 Serial Port:** 1x 3-Pin Phoenix connector
- **USB / KVM Port:** 1x USB-Type B (host) , 2x USB-Type A (device)
- **IR Input:** 1x 3.5mm stereo jack
- **IR Output:** 1x 3.5mm mono jack

Specifications

- **Operating Temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage Temperature :** -4°F to 140°F (-20°C to 60°C)
- **Unit Dimensions (W x D x H):** 190mm x 156mm x 25mm (without feet & connections)
- **Unit Dimensions (W x D x H):** 190mm x 159mm x 29mm (with feet & connections)
- **PoE+ draw:** 12.8W (typical), 13.5W (max load)

Included Accessories

IR Accessories	1 x IRR, 1 x IRE
Serial Accessories	1 x DB9
Rubber Feet	4 x
Rack Mount	1 x Mounting Kit

Control

IR
App (via ACM500)
RS-232 (via ACM500)
TCP-IP (via ACM500)
Front Panel Buttons

Regulatory Compliance