

OMNI-UE-210

USB over IP Host Transceiver with USB Audio



The BSS OMNI-UE-210 is a USB host endpoint that works together with one or more OMNI 200 USB device endpoints for professional-grade, networked USB 2.0 extension and routing over Gigabit Ethernet. Designed for modern collaboration and education environments, this OMNI 200 system allows USB hosts to communicate with cameras, conferencing bars, touch displays, and other USB devices across rooms or facilities.

The OMNI-UE-210 includes USB-C and USB Type-B ports for connecting host PCs. It features Virtual Network USB 2.0 Hub technology, which allows a USB host computer to communicate with USB devices located at up to six remote OMNI 200 endpoints over a network. Supporting USB 2.0 data rates up to 480 Mbps, the system accommodates both high-bandwidth devices and standard USB HID peripherals, providing integrators with the flexibility to place cameras, microphones, keyboards, mice, and other USB devices wherever they are needed.

Additionally, the OMNI-UE-210 integrates seamlessly with the OMNI 600 AV-over-IP platform, enabling USB hosts to communicate with devices at up to six OMNI 600 decoders or OMNI 200 endpoints. This interoperability allows networked USB integration alongside AV, enhancing system design possibilities for networked AV applications.

A defining capability of the OMNI-UE-210 is integrated Dante audio networking. It supports two-channel Dante audio input and output, as well as conversion of Dante network audio streams to USB audio (UAC) for the host computer. This allows DSPs, microphones, speakers, and other devices on the Dante network to interface seamlessly with applications on a PC.

The OMNI-UE-210 is designed for modern professional AV installations, with essential integration features including PoE remote powering, a low-power standby mode, and open APIs for third-party control.

| FEATURE HIGHLIGHTS

- USB 2.0 data signal routing and extension over Gigabit Ethernet
- USB-C and USB Type-B interfaces for host PCs
- Supports USB 2.0 data rates up to 480 Mbps
- Virtual Network USB 2.0 Hub for routing between a USB host and devices at up to six remote locations
- Mix and match with OMNI 600 Series networked AV decoders
- Also supports point-to-point USB 2.0 extension
- Plug-and-play operation with no driver installation necessary
- Two-channel Dante audio input and output (2x2) with USB audio conversion (UAC)
- PoE powered with low-power (standby) mode to conserve energy
- Enterprise-grade network security and standards including IEEE 802.1x, HTTPS, TLS, AES-256 encryption, LDAP, VLAN tagging, and QoS
- AVX Suite for OMNI 200 system configuration and management
- HARMAN HControl and BSS Direct Control provide open APIs for third-party control integration

| GENERAL SPECIFICATIONS

AUDIO	
Input Signal Types	Dante
Output Signal Types	Dante
Dante Audio Channel Count	2-Channel In and 2-Channel Out (2x2)
Dante Audio Sample Rate	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
USB 2.0	
USB Data	Connect a Host Computer to either the USB-B or USB-C connector. Route any combination of up to four of the following: OMNI-UD-210, OMNI-UD-210-WP, OMNI-VD-630-WP, OMNI-VD-660, and AMX SVSI N2600 decoders.
# of USB Hubs (Internal)	1
LATENCY	
Latency	<2 ms
Switching Stream-to-Stream	Dependent upon the Host Computer and Device *Can take several seconds to negotiate
BANDWIDTH	
Bandwidth	up to 500 Mbps
COMMUNICATIONS	
Ethernet	10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, and Static IP
*Note	Jumbo Frames Required
PORTS	
P0 PoE (Female)	10/100/1000Base-T Ethernet Port Provides network connection, network USB, and power
USB-C (Female)	Standard USB 2.0 Type-C connector
USB-B (Female)	Standard USB 2.0 Type-B connector
CONTROLS AND INDICATORS - FRONT PANEL	
ID Button	Flush pushbutton Press less than 4 seconds to send a network notification to identify the unit (the notification causes a pop-up dialog in AVX NAV Router to appear). Holding the button for longer than 30 seconds and releasing will cause the device to return to factory configuration.
POWER LED	On (green) when operating power is supplied via PoE
STATUS LED	On (green) when there is software activity
STREAM LED	On (green) when the unit is receiving a USB stream signal

| GENERAL SPECIFICATIONS

POWER SUPPLY	
Power over Ethernet (PoE)	<p>Can be powered via a PoE switch or other equipment with a PoE source. Conforms to IEEE 802.3af (802.3af Type 1)</p> <p>NOTE: For the unit to receive Power over Ethernet (PoE), it must be connected to a switch or other equipment that has a PoE PSE (Power Sourcing Equipment) port</p> <p>Currently the device relies on a 1-event, Type 1, OSI Layer-1 negotiation for power.</p> <p>WARNING: Do not run wiring connected to a PoE PSE port outside of the building where the PSE resides. It is for intra-building use only.</p>
INCLUDED ACCESSORIES	
Qty.	Description
8 (M3 x 9 mm) Flathead Philips Screw	#1 Philips Tip, attaches the joiner hardware to the devices
1	Painted metal spacer to join devices
1	Painted metal bracket to join devices
*Note	See Manual for Joiner Assembly Instructions
2	Painted L-Brackets
4 (M3 x 7 mm) Panhead Philips Screw	#1 Philips Tip, used to attach each L-Bracket to the device
ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	14 BTU/hr
GENERAL	
Product Dimensions (LWH)	3.75" x 5" x 1.2" (95.2 mm x 127.6 mm x 30.3 mm)
Product Weight	0.60 lbs (Approx. 0.27 kg)
Shipping Weight	1.10 lbs (Approx. 0.50 kg)
Regulatory Compliance	FCC, CE, KCC, UKCA, and UL (Including 2043)
SKU	BSS-UE210

