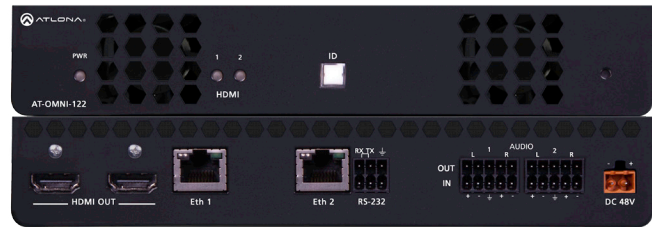
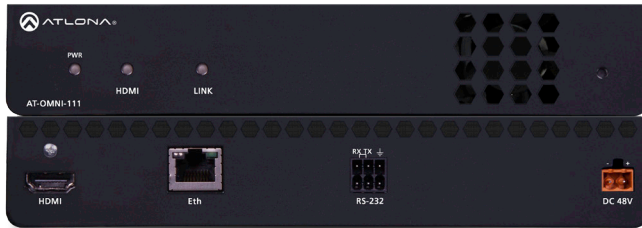


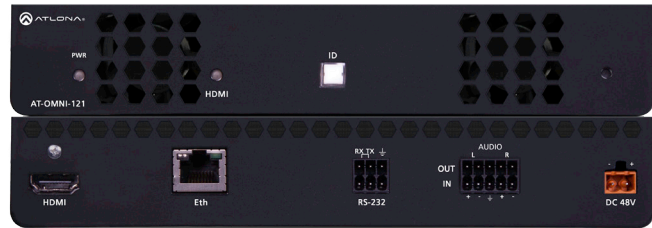
AT-OMNI-112



AT-OMNI-122



AT-OMNI-111



AT-OMNI-121

OmniStream is an all-new AV over IP product family from Atlona for distributing 4K video, audio, and control over a standard Gigabit network. It delivers the performance and dependability of traditional AV distribution, with the virtually unlimited scalability, security, and cost efficiency of integrating over IP networks.

OmniStream was engineered from the ground up at Atlona with several industry-exclusive capabilities including high density encoding and decoding, redundant AV networks and streams, secure content distribution, network error resilience, critical-quality 4K video compression with extremely low latency, and audio distribution.

Atlona specifically developed OmniStream to address the many technological and practical challenges associated with converging video onto IP networks. OmniStream is designed to integrate easily into a new or existing Gigabit network infrastructure, and deliver the same reliability, performance, and image quality expected of a baseband or HDBaseT™ video system.

Supports HDMI video up to 4K/UHD, plus audio and RS-232 control -

- 4K @ 24 Hz, UHD @ 30 Hz, and 1080p @ 60 Hz
- Video, audio, and RS-232 can be routed together or independently

High density video over IP integration -

- Dual channel units can process two independent services per chassis

Networked AV redundancy -

- Replicate AV over two separate networks and IP streams – a first for the pro AV industry
- Enables 99.9% system failover for mission-critical applications

Easy Setup with AMS -

- Automatic discovery with IP address configuration
- Helps get the system flowing video in no time

Secure content distribution -

- AV presentation content can be encrypted to prevent unauthorized access
- HDCP also supported

Professional visually lossless video compression using VC-2

Highly robust and reliable over IP networks -

- SMPTE FEC (forward error correction) for very high resilience to network errors
- Ensures reliability and dependability of traditional video and audio routing platforms

Extremely low latency of less than 0.5 frame from encode to decode -

- <8ms for 60 Hz video – lowest in the proAV industry

Standard Gigabit network infrastructure -

- Works with standard, off-the-shelf Gigabit managed switches from Cisco and others
- Can easily be integrated into existing network infrastructures

Design highly flexible and scalable AV systems -

- No theoretical limitations on I/O size, switching capacity, or transmission distance
- “Virtual matrix” – can route any source to any destination, anywhere on the network
- Easily add sources, displays, and additional switches as needed

Power over Ethernet

Flexible audio integration

Specifications

Video Resolutions

| | | |
|--------------------|--|--|
| Video | 4096x2160@24Hz, 3840x2160@24/25/30Hz (UHD), 1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@25/29.97/30Hz, 720p@30/50/59.94/60Hz | |
| VESA* | 1920x1200, 1680x1050, 1600x1200, 1600x900, 1440x900, 1400x1050, 1366x768, 1360x768, 1280x1024, 1280x800, 1280x768, 1152x768, 1024x768 | |
| Codec | VC-2 | |
| Latency | 0.5 frames (e.g. 1080p@60Hz latency is <8ms) Note: Unusual network configurations may increase overall latency | |
| Bitrate | Up to 900 Mbps | |
| Color Space | YUV, RGB | |
| Chroma Subsampling | 4:4:4, 4:2:2 | |
| Color Depth | 8-bit, 10-bit, 12-bit | |
| Scaling | Up/down conversion | |

Audio

| | | |
|----------------|--|--|
| Digital IN/OUT | LPCM 2.0, LPCM 5.1, LPCM 7.1 Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos DTS, DTS-HD Master Audio | |
| Analog OUT | Analog 2Ch, OMNI-121 - 1 x Stereo, OMNI-122 - 2 x Stereo | |
| Sample Rate | 32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz | |
| Bit Depth | up to 24-bit | |

Distance

Max distance dependent on Network configuration

Signal

| | | |
|------------|--------------------------------------|--|
| CEC | Yes - Display: volume, power, input | |
| HDCP | 1.4 switchable, hardware capable 2.2 | |
| Scrambling | Up to AES 256 bit | |

IP

| | | |
|----------------|---|--|
| Protocol | RTP | |
| Ethernet Speed | 10/100/1000 Mbps | |
| Address | DHCP, static | |
| QoS Tagging | Per RFC 2475 | |
| FEC | Per SMPTE 2022-5:2013 Columns: 1-20 Rows: 0, 4-20 | |

RS-232

| | | |
|-----------|--|--|
| Bit Rate | 2400-115200 bps | |
| Connector | Molex - OMNI-111 & 121 - 3 pin, OMNI-112 & 122 - 2 x 3 pin | |

Temperature

| | | |
|-----------|--------------------------|---------------|
| Operating | 0°C to 50°C | 32°F to 122°F |
| Storage | -20°C to 60°C | -4°F to 140°F |
| Humidity | 20 to 90% non-condensing | |

Power

| | | |
|-------------|---|--|
| Consumption | ~13W w/o analog audio, TBD w/ analog audio | |
| Supply | Input: AC 85~264VAC 50/60Hz Output: DC 48V 0.83A | |

Dimension

| | | |
|-----------|---------------------|---------------------------|
| H x W x D | 34 x 208 x 112 (mm) | 1.34 x 8.19 x 4.41 (inch) |
|-----------|---------------------|---------------------------|

Weight

| | | |
|----------------|--------|----------|
| Dual-Channel | 0.7 kg | 1.54 lbs |
| Single-Channel | TBD kg | TBD lbs |

Certification

| | | |
|--------------|--------------------------------|--|
| Power Supply | CE, FCC, cULus, RoHS, CCC, RCM | |
| Product | CE, FCC, RoHS | |

*All VESA resolutions are 60p