

1G AV-over-IP Receiver for 4K60 signals



Details

Lightware’s revolutionary GEMINI GVN 1Gb AV-over-IP extender family, where scalability, flexibility, and rapid deployment take center stage. Designed to meet the demands of modern audiovisual environments, the GEMINI GVN is a virtual matrix system that seamlessly switches audio, video, and USB transmission with unparalleled ease.

At the heart of the GEMINI GVN system is the Matrix Management Unit (MMU) device, providing full functionality from a centralized control point, eliminating the need for individual endpoint configurations. With seamless switching capabilities, users can effortlessly manage their audiovisual setup for optimal performance.

Equipped with Lightware’s Advanced EDID Management system, the GEMINI GVN ensures that the decoders are capable of scaling HDMI 2.0 video signals up to a maximum resolution of 4K UHD @ 60 Hz either on CAT (up to 100 meters) or on fiber optics (up to 10 kms) with HDR, HDR+, and Dolby Vision support.

Supporting RS-232 control channel, the GEMINI GVN offers enhanced control options for a seamless user experience. The built-in USB ports support KVM functionality and can handle USB 2.0 touch screen, webcam, mass storage, further enhancing connectivity and versatility.

Compliant with HDCP standards, the GEMINI GVN guarantees secure content transmission. With support for the DHCP network management protocol, configuration and management become effortless, simplifying system integration.

The TX device utilizes PoE (IEEE 802.3af) remote power supply, while the RX requires PoE+, providing efficient power delivery for seamless operation. As part of our commitment to sustainability, no power supply is included, but available separately if needed, aligning with our green policy.

Operating on a 1G Ethernet network, the GEMINI GVN boasts low power consumption (~10W), reducing energy costs and environmental impact. Additionally, our commitment to sustainability extends to our packaging, which is made from paper-based materials, further minimizing our ecological footprint.



Features

- Visually Lossless Video Codec (proprietary codec based on JPEG2000)
- Zero frame latency (~3 ms end-to-end latency at 4K60 transmission)
- All audio formats supported by the HDMI 2.0 standard are supported up to 7.1-channels, LPCM, compressed audio and High-Bitrate audio (e.g. DTS-X, Dolby Digital, Dolby Atmos)
- Analog audio support (LPCM stereo) with selectable direction (input or output)
- Offers a RS-232 port
- Support the distance up to 100m (328ft) between the transmitter endpoint and Network Switch (Cat5e)
- Fiber connection supported with standard SFP connector (the optical module is not part of the product)
- Supports USB KM over IP
- Supports full USB2.0 over IP
- HDMI 2.0 output up to 4K@60Hz 4:4:4 resolution
- Supports HDCP 2.2
- Supports seamless video switching (without black screen)
- Supports video scaling function
- Supports PoE+ PD (IEEE 802.3at)
- External UL certified 12V power supply (not part of the product, can be purchased separately)
- Compatible with Lightware rack shelf
- eco-friendly paper-based packaging
- UKCA, CB, CE EMC, CE LVD, FCC Certification
- Security including AES-256 encryption, 802.1x, SSH

Specifications

Operating Temperature	32°F to 113°F (0°C to 45°C) 10% to 90%, non condensing
Storage Temperature	-4°F to 140°F (-20°C to 70°C) 10% to 90%, non condensing
Power Consumption	<10 W in typical use-cases, but depends from the USB devices
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)
Dimensions	221mm x 25mm x 120mm (W x H x D)