1G AV-over-IP Transmitter for 4K60 signals with Dante audio support

The GVN-HC-TX220AP-DNT is the next-generation transmitter in the Gemini GVN 1G AV-over-IP family. It introduces native USB-C connectivity with 100 W charging, Ethernet and audio over USB, and auto-selecting between USB-C and HDMI inputs — enabling true single-cable collaboration over existing 1 Gb networks. The DNT version adds a 2-channel Bidirectional Dante capability, enabling flexible audio routing between HDMI, analog, USB and Dante networks (contains UAC USB-Audio converter)



Details

Lightware's Gemini GVN ecosystem offers a flexible and scalable AV-over-IP solution. The TX220AP supports 4K60 4:4:4 video, HDR, Dolby Vision, and high-bitrate audio formats. It is fully compatible with the GVN Matrix Management Unit (MMU) for centralized configuration and monitoring. The transmitter serves as a bridge between modern USB-C laptops and HDMI-based AV systems.

Features

- **Full USB-C functionality** video, audio, data, Ethernet (100 Mbps), and 100 W charging
- **Dual input** + HDCP 2.2
- **Auto-select** between video inputs
- **Low-frame latency (3 ms end-to-end)**
- **USB 2.0** Transparent full USB device transmission
- **USB KVM** Composit USB HID device transmission
- **PoE PD** and external 24 V/160 W PSU
- **DANTE capable** Audio bridge over USB-C
- **SFP cage for fiber extension** (Mode and distance depends on the module) optical module optional
- **Local HDMI 2.0 output**
- **Analog audio support**
- **Audio bridge over USB-C**
- **User Ethernet (100 Mbps) over USB-C**
- **Charging up to 100 W (with PSU)**
- **CAT distance up to 100 m (328 ft)**
- **SFP cage for fiber extension** optical module not included
- **External UL-certified 24 V/160 W power supply**
- **Security: HDCP 2.2**
- **Preview MJPEG stream** up to 1280×720
- **CE, CB, FCC certifications**
- **Eco-friendly paper-based packaging**

Specifications

Video Inputs	HDMI 2.0 + USB-C (video, audio, data, Ethernet, Charging)
Local Video Output	HDMI 2.0 (up to 4K60 4:4:4)
AUDIO Input/output	LPCM stereo (analog)
Video Codec	JPEG2000 (visually lossless)
Latency (endpoint to endpoint)	≈ 3 ms E2E at 4K60
Network	1 Gb Ethernet (CAT5e) + or fiber
Connector	2x RJ45 + SFP
USB	USB 2.0 + KVM support
Power	PoE (without 100W charging) or 24V / 160W PSU (included)
Security	HDCP 2.2
Dimensions	221 × 25 × 150 mm (W×H×D)
Certifications	CB, CE EMC, CE LVD, FCC
Dante	2 channel bi directional Dante capability , with UAC function