IPX-TC1 Series

4K IP Audio/Video Distribution Transceiver

Features

- Configure as Transmitter (Encoder) or Receiver (Decoder)
- 4K2K Over 10G Fiber (-F) or 10G CAT (-C)
- Zero Compression & Zero Latency
- 128x128 Capable with HDCP, Larger for Non-Encrypted Sources
- Videowall Capability with Zero Latency
- Seamless & Break-away Switching
- SFP+ for Multi/Single Mode Fiber (-F Model)
- 1G LAN PoE
- 2 HDMI Inputs, 1 HDMI Output
- Line In/Out Stereo
- RS-232 Serial Port & IR (Bidirectional)
- User Configurable OSD
- Integrated Web Server for Custom Control Pages
- ExtremeUSB® - USB 2.0 480Mbps Option (Host or Device Configurable)
- Dante® IP Audio Option
- Front Keypad & IR Remote
- Rack & Under Table Mounting

Patent Pending

The **IPX-TC1 Series** provides one of the most advanced IP Streaming solutions on the market utilizing Aurora's IPBaseT™ technology, which synergizes various IP/AV standards to work together as one. It is the industry's first 4K2K transceiver with zero compression and latency based on BlueRiver NT™ platform. Using a transmitter (encoder) and receiver (decoder), respectively, used to be the standard – until now. The IPX-TC1 Series can be set up as either one to make installation, inventory, and troubleshooting easier.

Another industry first is the option slot to add other IP capabilities, like ExtremeUSB® (USB 2.0 over IP) or Dante® audio, for a more complete, distributed system.

Audio, video, data, and control can be sent securely to one or many units using off-the-shelf 10G Fiber or CAT Ethernet switches. When the IPX-TC1 is set up to be a transmitter, the 2 HDMI inputs become a source switch and the HDMI output becomes a potential loop out. When set up as a receiver, a user can select the local HDMI inputs or an IP source. Seamless switching of the sources further enhances the presentation. Regardless of how the IPX-TC1 is set up, the audio can be de-embedded at any location, break away, and/or be sent to or received from a Dante® enabled device. The USB 2.0 option is also flexible, working as a KVM and/or a high-speed data transfer (480Mbps) for memory sticks. Each IPX-TC1 USB feature can also be set as a host or a device. To keep the system friendly, a customizable OSD and web server are available to be programmed as required. For RJ-45 LAN devices, the 1G Ethernet port allows full bandwidth end-to-end over the IPX-TC1 Series 10G fiber or CAT port.

Choice is important. That's why the IPX-TC1-F has an SFP+ port that can use single or multi-mode fiber and the IPX-TC1-C can use Category 5e/6/6A - making the IPX-TC1 the ultimate AV IP product on the market today.

Technical Specifications

Model Name	IPX-TC1
Technical	
Compression	Zero
Latency	Zero
HDMI Inputs	2
HDMI Outputs	1
Audio Analog	Stereo Line In/Out (3.5mm TRS)
10G Fiber Ethernet	SFP+ (Single Mode or Multi-Mode)
10G Copper Ethernet	RJ-45 330ft with CAT 6A
LAN	RJ-45 10/100/1000M PoE (PSE)
Video Bandwidth	340MHz
Video support	Up to 4K2K 4:2:0 @60Hz
Audio support	Up to 32 channels & Break-away Capable
RS-232	Up to 115k Baud (3.5mm TRS)
IR	Bi-Directional (3.5mm TRS)
USB Connector	USB 2.0 Type A (Host or Device Software Selectable)
Expansion Port	SO-DIMM for ExtermeUSB® or Dante® Options
Interface	IR or Keypad via OSD, Webserver
Mechanical	
Housing	Black Aluminum Enclosure
Dimensions [L x W x H]	175 x 102 x 33.3mm [6.875" x 4" x 1.31"]
Weight	1.13g [2.5lbs]
Mounting	Optional: Rack mount vertical, Rack mount horizontal, Under table mount
Power supply	48V DC (2 pin Euro) or PoE (LAN)
Power consumption	13 Watts (-F) / 15 Watts (-C)
Operation temperature	0~40°C [32~104°F]
Storage temperature	-20~60°C [-4~140°F]
Relative humidity	20~90% RH [no condensation]
Package Contents	1x IPX-TC1 (–F or –C)

Note: Specifications subject to change without notice.

AV Room Combining Application

Picture three adjacent rooms separated by configurable dividers. This setup is very common to hospitality and business centers, and normally, AV functionality would require a lot of equipment with limitations to the overall configuration of the rooms. The IPX Series topology would be an IPX wall plate or several in each room with the Dante® option and run the fiber back to an industry standard 10G switch. Next, run fiber or CAT cable to the IPX-TC1 configured as a receiver to the display device of each room. It's that simple. Even further, Aurora offers OM3 with one pair 18 gauge copper in a single sleeve, pre-terminated and ready for pull cord to allow remote power of all devices when using IPX-TC1-F.

But really - what can the IPX system do? First, any of the wall plates can be routed with zero compression and latency to any of the displays. The audio from any of these wall plates can be routed independently to a Dante® sound system to be mixed and amplified for the speakers. The audio never needs to be de-embedded nor does it ever convert to analog in its path to the amplifier. The video can be seamlessly switched with the IPX, making the switching of sources clean and quick. If overflow rooms are required, simply add more connections to the 10G switch along with more IPX-TC1. The system is only limited by the configuration of the switch and the imagination of the designer. For more information on this and other applications, contact sales@auroramm.com.