
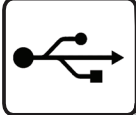






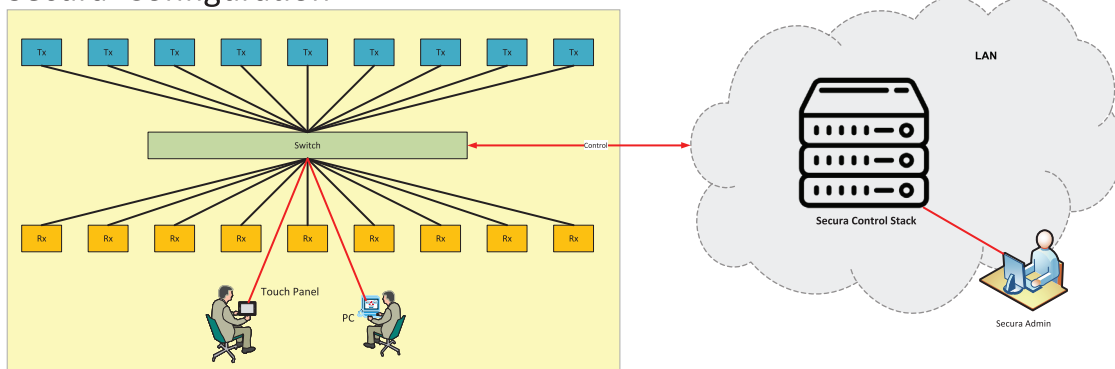
TRANSMITTERS AND RECEIVERS High Resolution / Ultra Low Latency

The PESA SECURA® Mezzanine Codec Transmitters and Receivers can securely transport up to 4K/60p video and audio including Keyboards/Mouse and CAC readers. Perfect for local area networks and campus implementations this codec supports the highest resolution with the lowest latency (under 1ms).

SECURA® uses AES256 encryption to transport video and audio on the data plane and NIST FIPS 140-3 encrypted signals on the control plane to support a wide number of security levels such as Classified, Secret, Top Secret and Unclassified. DoD and IC's select PESA SECURA® critical environments because of its capabilities and support of the Zero Trust model.

	AES 256 A/V/USB Encryption		USB for Keyboards, Mouse, and CAC
	FIPS 140-3 Control mTLS 1.2		Video Scaling and EDID

Secura® Configuration



Front



Rear



Specifications

A/V Connectivity	HDMI 2.0 compliant with HDCP2.2 or IP Ethernet A/V input
Video Format	All resolutions and frame rates up to 4096 x 2160 at 60fps 8-bit, 10-bit, and 12-bit, 4:4:4, 4:2:2 and 4:2:0 HDR10 and HLG
Max Video Format	UHD 4k60p 4:4:4
Video Codec	JPG
Video Processing	Upscaler/downscaler (EDID) in receiver, cropping, padding, logo, and text insertion
Latency	1ms end-to-end (encoder + decoder direct)
USB	USB 2.0 ports allowing keyboard/mouse and CAC
Audio	HDMI embedded audio or front panel analog audio via 3.5mm jack
Control Plane Security	FIPS 140-3 provisional CMVP CNSA (Suite B) Crypto with Mutual TLS authenticating, Trusted Protection Module (TPM)
Data Plane Security	AES-256 fixed-key encryption for video, audio, and USB
Network Protocols	IGMPv3, TCP/IP
Video HW	FPGA
CPU	ARM

Interfaces

Audio/Video	HDMI 2.0 input (encoder only) HDMI 2.0 output (decoder only) 3.5mm jack (TRS) analog audio input (encoder only), and output (decoder only)
Network	1 Gb Ethernet RJ45 and 10G Ethernet SFP+

Physical Properties

Temperature	Operating: 0° C to +55° C
Dimensions (L x W x H)	200 x 116 x 23 mm (7.9 x 4.6 x 0.9 in)
Power Supply	12V DC power connector
Power over Ethernet	PoE – 18 watts peak
Power Consumption	18W nominal