TRANSMITTERS AND RECEIVERS
High Resolution / Low Bandwidth

The PESA COTS Transmitters and Receivers can securely transport HDMI 4K/60p video and audio and USB-C such as Keyboards/Mouse and CAC readers.

SECURA® can transport those encrypted signals within a wide number of security levels such as Classified, Secret, Top Secret and Unclassified. DoD and IC choose PESA SECURA® for their critical environments because it is based on Zero Trust.
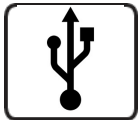
AES 256 A/V/USB Encryption	**HEVC** HEVC or H.264 Codec
FIPS 140-2 Control mTLS 1.2	Video Scaling and EDID
USB-C Connector	SFP+ 10 Gb/s Fiber Optic Ethernet

CTRL & MGMT
Essence

Shipping Q4 2023

PESA

Website:
www.pesa.com

Email:
sales@pesa.com

103 Quality Circle, Suite 210
Huntsville, AL 35806

US Toll Free: 1.800.323.7272
Telephone: 1.256.726.9200
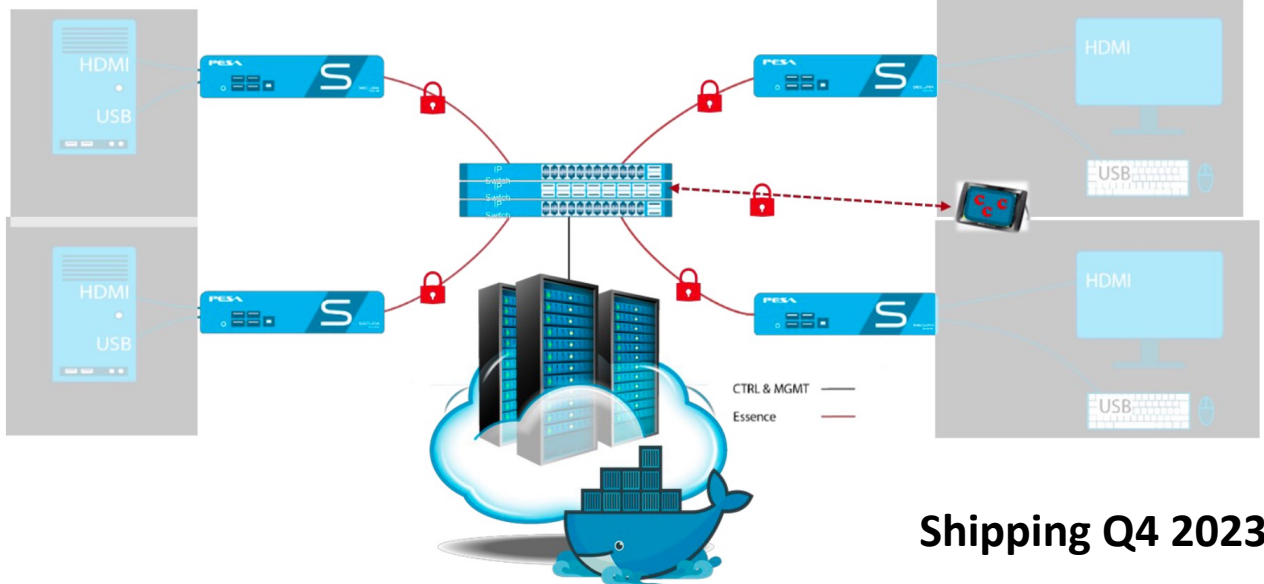
Specifications

A/V Connectivity	USB-C with HDCP 2.2 or IP Ethernet A/V; HDMI 2.0/DisplayPort 1.2 USB adapters Capture cards can also be used
Video Format	Input – Up to 4096 x 2160 at 60fps, 4:4:4, 8-bit/10-bit Output – Up to 4096 x 2160 at 60fps, 4:2:0 – MPEG and variable GOP
Video Codec	H.265 (HEVC) or H.264 (AVC) MPEG
Video Processing	Upscaler/downscaler in receiver, cropping padding, logo and text insertion
Latency	20ms end-to-end (encoder + decoder)
USB	USB 2.0 and 3.X ports allowing keyboard/mouse and CAC
Audio	Embedded audio or front panel analog audio via 3.5 mm jack
Control Plane Security	FIPS 140-2 using CNSA key management for mTLS for control, Trusted Protection Module (TPM)
Data Plane Security	AES-256 fixed-key encryption for video, audio, and USB
Network Protocols	IGMP, TCP/IP
Video HW	GPU
Controller	CPU (AMD64)

Interfaces

Audio/Video	IP input/output using RTP/RTSP/TS or other IP video USB-C with Adapter for HDMI 2.0, Display Port 1.2, and SDI or PCIe capture card
Network	1 Gb Ethernet RJ45 and 10G Ethernet SFP+ with NIC

Physical Properties

Temperature	Operating : 0º to +70º C
Dimensions (L x W x H)	200 x 116 x 23 mm (7.9 x 4.6 x 0.9 in)
Power Supply	19V DC power connector
Power Consumption	25W nominal