



# CONTROL

## HYBRID MEDIA DISTRIBUTION SYSTEM

Secura Control provides secure distribution of critical audio and video information across multiple security domains using a single IA/IO accredited, Defense Information Systems Agency (DISA), control system. Multiple-security domains can securely exist within a single video-distribution architecture by means of scrambling or encrypting the media components before their signals are introduced to the routing or switching matrix. Once secured, classified information can be distributed across multiple domains with access limited to authorized users.

### System Architecture

Secura Control defines, configures and manages all audio, video and metadata as well as their inherent security domains. As a Common Access Card (CAC) compliant system, Secura Control operates on a client-server model which bolsters physical security. Typically housed in a secure and harden rack room environment, access to the physical device (s) can be limited to authorized personnel and senior administration. The Secura Control solution is comprised of a central matrix router or Ethernet switch, transmitters, receivers and KVM (keyboard, video, mouse) USB connectivity. Both traditional SDI audio and video, can be combined with Ethernet audio and video which makes Secura Control unique and extremely flexible.

### Secura Central Matrix

The Secura Central Matrix is available as either: (a) matrix-based router with available redundancy, supporting data rates from 270 Mb/s up to 12 Gb/s for all common A/V formats. or (b) Ethernet switch using IP with available redundancy, supporting 10 Gb/s and 1 Gb/s. In a hybrid environment, a matrix-based

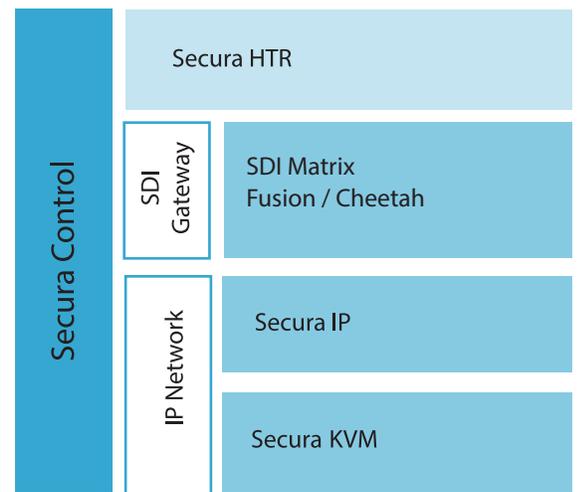


Fig1: Secura Control - secure distribution across multiple security domains.

router and an IP Ethernet switch can be combined to meet delivery. Secura Central Matrix is fully scalable and can be implemented in environments requiring a few ports to a full enterprise system with up to thousands of IP ports.

**Secura HTR & Secura IP Transmitters**

Used for matrix-based architectures (SDI or Ethernet), converts various HDMI sources for industry-standard transport. Secura HTR connects to the matrix using traditional coax or fiber cables, and secures the source media using a proprietary, patent-pending algorithm that alters the transport signal. Once secured, audio and video signals become unusable until it is processed by the corresponding Secura Receiver. Each Secura Transmitter is programmed to the unique classification of the source device and can manage up to eight (8) unique classifications as security domains for isolated transmission through the system. Secura HTR Transmitter also manages multi-domain signals which it transmits to the central matrix while retaining its unique security parameters.

In an Ethernet IP environment, Secura IP transmitter converts HDMI media to industry-standard IP transport using a media-class, enterprise Common Off-The-Shelf (COTS) IP switch. Source media is secured using NSA recommended AES256 encryption with dynamic keys. Encrypted media can only be accessed by the corresponding Secura IP/KVM receiver configured for decryption of the specified transport stream.

**Secura HTR & Secura IP Receivers**

Receive individually secured media stream(s) from either the matrix-based router or Ethernet IP switch according to the environment. Both formats of Secura Receiver, (Secura HTR and Secura IP), restores corresponding secured media to its native format, HDMI, for the authorized user.

**Secura KVM Transmitter / Receiver**

Operates in Ethernet IP switched networks and uses bi-directional USB encrypted serial signals for input device control (*mouse and keyboard*). Secura KVM is designed to deliver 4K resolutions to every monitor in the users' workspace. Authorized users directly access the server from their work stations. Signals generated via keyboard and mouse are passed through transceivers.

**ABOUT PESA**

As a leading provider of secure audio/video (A/V) Baseband and IP connectivity products, PESA offers a wide selection of multi-path streaming products, routing switchers, matrix switchers, extenders, converters, media extenders, and signal processing gear to support government, military, industrial, commercial, medical, broadcast, and mobile truck applications. From large to small-scale A/V routing and extender products to multiple IP streaming appliances, PESA offers a diverse suite of AV products, all of which are supported by 24/7 technical support. PESA is located in Huntsville, Alabama, with regional sales offices throughout North America, Europe and China. Our cost effective solutions are available around the world through our industry leading team of Channel Partners offering local support and installation. All products mentioned herein are trademarked property.

Learn more: [www.pesa.com](http://www.pesa.com)



Contract No.: GS-03F-062BA  
Cage Code: OMJ96  
DUNS No.: 793013822  
Schedule: 58I; SIN 58-1

20181031LIB1700/001



103 Quality Circle, Suite 210, Huntsville, AL, USA 35806  
US Toll Free: 1.800.323.7372, Tel: 1.256.726.9200  
[www.pesa.com](http://www.pesa.com)