



# NEOUS

## SECURE CROSS-DOMAIN

### KVM AND VIDEO MATRIX SOLUTIONS

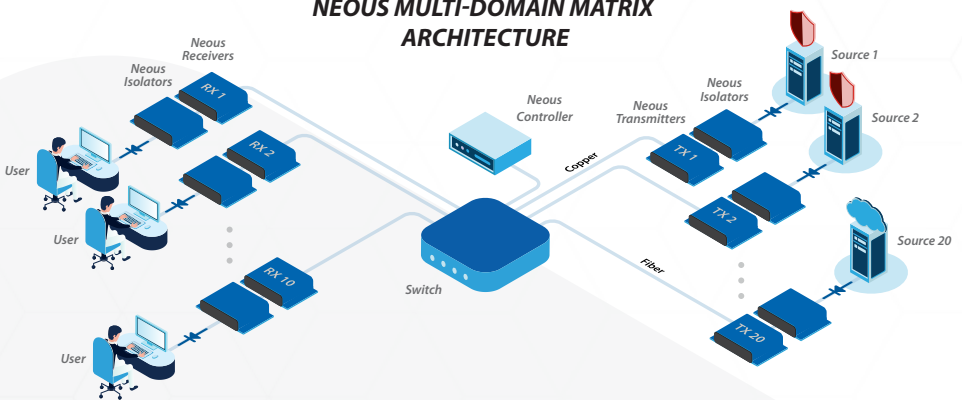
# THE SOLUTION

## WHAT IS NEOUS?

Neous is a secure KVM over IP solution, implementing flexible and scalable KVM/AV matrix solutions for working securely with multiple sources of different classifications when users and sources are physically separated from each other.

- **Flexible and scalable** – Deploy only what you need and expand as you grow
- **Secure** – Based on NIAP certified components. Uses advanced encryption and Network Access Control (NAC)
- **Prevents data leakage** in a cross-domain, multi-classification environment
- **Fast zero-latency switching**

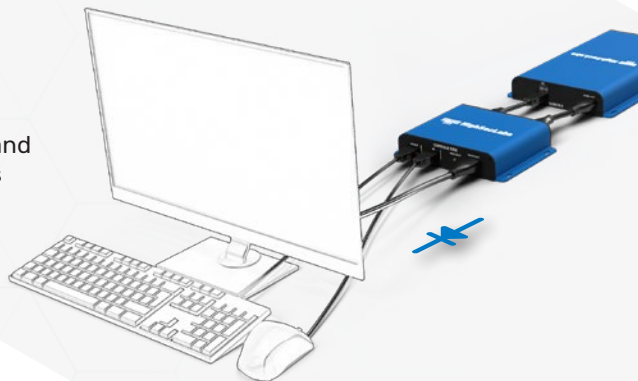
### NEOUS MULTI-DOMAIN MATRIX ARCHITECTURE



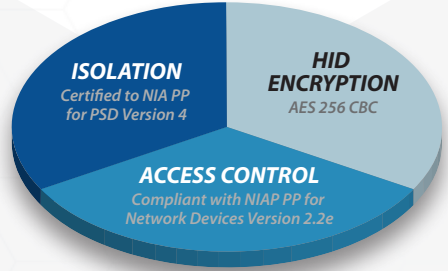
Using Neous, securely implement the most common cross-domain matrix solutions:

- **KVM matrix**
- **Video matrix**

Neous is perfect for control rooms, command and control centers, operational centers and other demanding applications where multiple users interact with many sources across multiple domains.

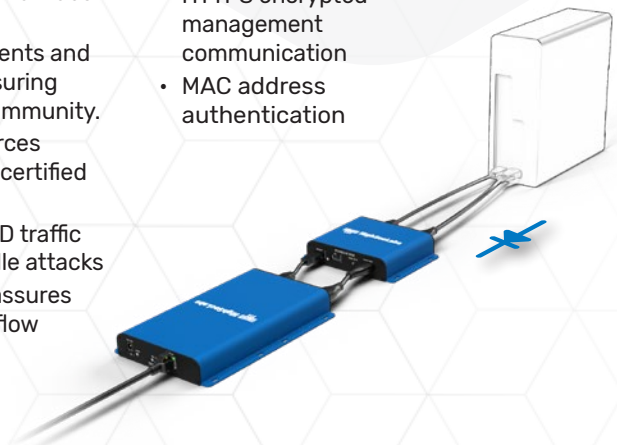


# SECURITY HIGHLIGHTS

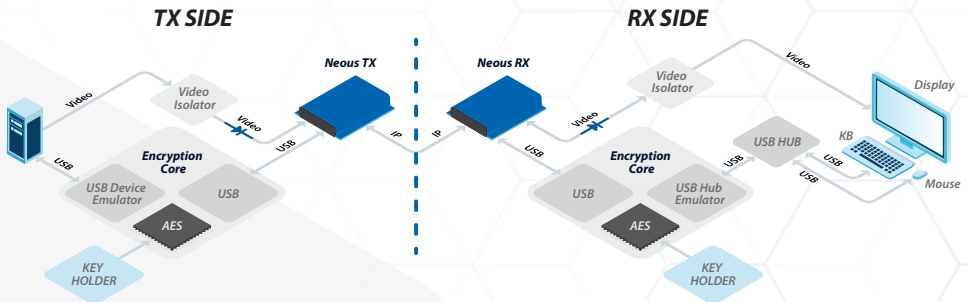


With Neous, work in a cross-domain, multi-classification environment securely without the threat of data leaks, insertion of malicious code or unauthorized use by using the highest security components available:

- Host and destination isolation using NIAP PP4.0 for PSD certified KVM and video isolators create a domain agnostic network for KVM and video matrix implementations.
- Uses pre-certified components and Industry standard tools assuring isolation and data leakage immunity.
- Isolator auto-sensing enforces system use only with NIAP certified isolators.
- AES 256 CBC encrypted HID traffic prevents man-in-the-middle attacks
- Secure EDID pass-through assures unidirectional information flow
- 802.1x NAC and NIAP PP for Network Devices Version 2.23 compliance prevent unauthorized connects.
- HTTPS encrypted management communication
- MAC address authentication



The Neous isolation core implements HW enforced unidirectional data flow and encrypts/decrypts the HID data.



# NEOUS COMPONENTS

Neous components are available for 10Gbps fiber and copper networks.

## TRANSMITTER

- **Video Matrix:** Zero-latency video encoding and transmission
- **KVM Matrix:** Zero-latency encoding and transmission of video, reception and decryption of keyboard and mouse.

Both types of transmitters are operational only when connected to the linked Neous Isolator.



## RECEIVER

- **Video Matrix:** Zero-latency video reception, decoding and multiview support.
- **KVM Matrix:** Zero-latency video reception and decoding; encryption and transmission of keyboard and mouse.

Both types of receivers are operational only when connected to the linked Neous Isolator.



## ISOLATOR

- **Video Matrix:** NIAP PP4.0 PSD certified video isolator.
- **KVM Matrix:** NIAP PP4.0 PSD certified KVM isolator.



## CONTROLLER

Implements the logic for the solution type (KVM or Video matrix), performs the mapping of sources to users, along with user/source permissions. Manages the distribution of encryption keys.



## TRANSMITTER & RECEIVER

### MAIN FEATURES

- DP/HDMI 4K30Hz 4,4,4
- USB HID Type B/A (TX/RX) (KVM only)
- 10Gb Ethernet for video/audio, 1Gb for control
- SFP+ port for fiber
- Encrypted USB HID (KVM only): AES 256 CBC
- NAC, 802.1X, SSL



## CONTROLLER

### FEATURES

- KVM switching (KVM matrix only)
- Video only switching
- Video matrix multiview support
- TX/RX configuration
- Permissions Management
- NAC



Frequency: 12.75 GHz	Utilization: 97 %	Speed: 26 Gb/s
Trackers: 52618	Data Compression: 1/72	Seed: 750

# ORDERING INFORMATION

MODEL	TYPE
<b>SVFX10PHT-M</b>	Neous Fiber Video Matrix TX with Linked Isolator
<b>SVFX01PHR-M</b>	Neous Fiber Video Matrix RX with Linked Isolator
<b>SVCX10PHT-M</b>	Neous Copper Video Matrix TX with Linked Isolator
<b>SVCX01PHR-M</b>	Neous Copper Video Matrix RX with Linked Isolator
<b>SKFX10PHT-M</b>	Neous Fiber KVM Matrix TX with Linked Isolator
<b>SKFX01PHR-M</b>	Neous Fiber KVM Matrix RX with Linked Isolator
<b>SKCX10PHT-M</b>	Neous Copper KVM Matrix TX with Linked Isolator
<b>SKCX01PHR-M</b>	Neous Copper KVM Matrix RX with Linked Isolator
<b>MCV11EC-M</b>	Neous Video Matrix Controller
<b>MCK11EC-M</b>	Neous KVM Matrix Controller



## HIGH SEC LABS (HSL)

DEVELOPS HIGH-QUALITY CYBER-DEFENCE SOLUTIONS FOR PROTECTING NATIONAL ASSETS AND INFRASTRUCTURE IN THE FIELD OF NETWORK AND PERIPHERAL ISOLATION.



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