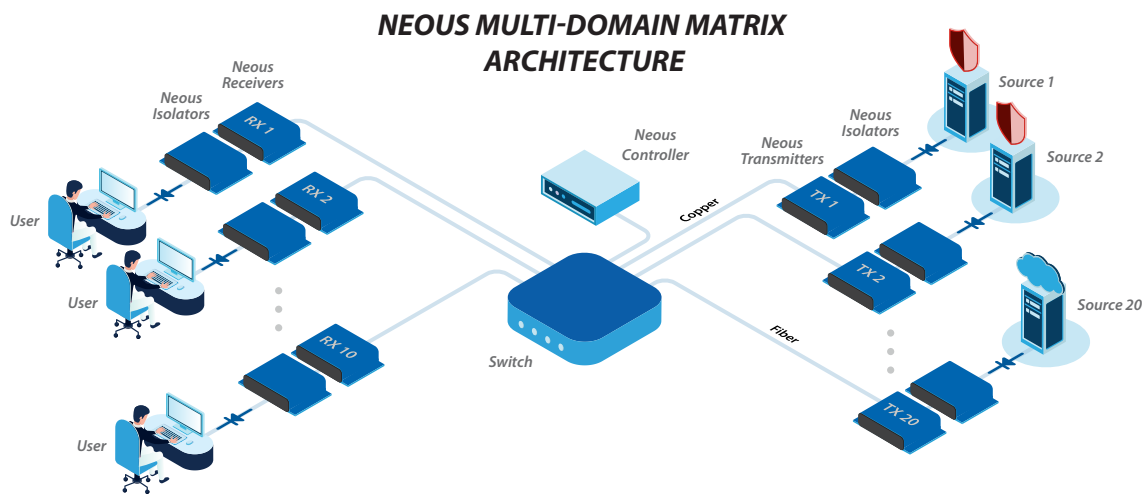


NEOUS FAMILY OF SECURE MULTI-DOMAIN KVM AND VIDEO MATRIX SOLUTIONS

Neous is the first secure KVM over IP solution for implementing KVM and Video matrix solutions, and is especially suited for installations where users and computer sources are separated from each other. The Neous family simplifies how multiple users work securely with multiple computer sources of different classification levels. KVM matrix or video matrix Neous implementations provide a high-speed, low-latency, and high-performance architecture. The solution uses NIAP certified components, encryption, and Network Access Control (NAC) to protect against data leaks and breaches.



Neous Architecture of a Secure Multi-Domain KVM Matrix Solution

The Neous architecture provides powerful secure applications in a many-to-many, multi-domain environment:

- Video matrix with Multiview support
- KVM matrix

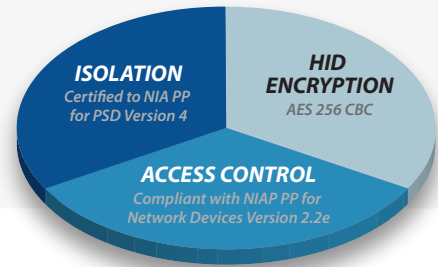
The Neous solution is perfect for control rooms, command and control centers, operational centers and other demanding applications where multiple users are interacting with data from many sources.





SECURITY HIGHLIGHTS

- Host and destination isolation using NIAP certified KVM and video isolators create a domain agnostic network for a KVM and video matrix
- Uses pre-certified components and industry standard tools assuring isolation and data leakage immunity
- Isolator auto-detect enforces system use only with isolator
- Encrypted HID traffic prevents man-in-the-middle attacks
- Secure EDID pass-through assures unidirectional information flow
- 802.1x NAC prevents unknown connections
- HTTPS encrypted management communication
- MAC address authentication



NEOUS FAMILY BUILDING BLOCKS

Neous Controller

Determines the type of the solution (e.g. KVM matrix or video matrix), performs the mapping of sources to users, along with the user/source permissions. The nature of the solution is software defined.

Neous Transmitter

Transmits video data from the source to the user, and decrypts the HID data from the user to the source. Works over both fiber and copper lines. Depending on the version used, handles either video only, or the complete KVM data. The solution is secured through a linked external isolator/encryptor.

Neous Receiver

Receives the video data from source and transmits the keyboard and mouse USB data from the user to the source. Works over both fiber and copper lines. Depending on the version used, handles video only or the complete KVM data. The solution is secured through a linked external isolator/encryptor.

Neous Isolator

Certified for NIAP PP4.0 solutions. Imposes a unidirectional data flow of the video from the source to the user and HID from the user to the source. Encrypts/decrypts HID. Available as a linked external product that is bundled as a set with the Neous Receiver or Transmitter.



Secure Isolators



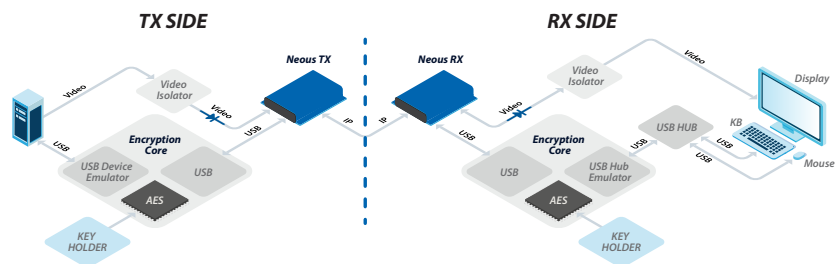
Transmitter



Receiver



Controller



Neous Isolation and Encryption Core

LIST OF NEOUS PRODUCTS

MODEL	TYPE	FEATURES
SVFX10PHT-M	Neous Fiber Video Matrix TX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps SFP+; DP/HDMI Combo source port; NIAP certified Isolator.
SVFX01PHR-M	Neous Fiber Video Matrix RX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps SFP+; DP/HDMI Combo console port; Multiview support; NIAP certified Isolator
SVCX10PHT-M	Neous Copper Video Matrix TX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps RJ45; DP/HDMI Combo source port; NIAP certified Isolator
SVCX01PHR-M	Neous Copper Video Matrix RX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps RJ45; DP/HDMI Combo console port; Multiview support; NIAP certified Isolator
SKFX10PHT-M	Neous Fiber KVM Matrix TX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps SFP+; DP/HDMI Combo source port; USB-B HID port; AES 256 CBC HID decryption; NIAP certified Isolator
SKFX01PHR-M	Neous Fiber KVM Matrix RX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps SFP+; DP/HDMI Combo console port; 2x USB-A HID console port; AES 256 CBC HID encryption; NIAP certified Isolator
SKCX10PHT-M	Neous Copper KVM Matrix TX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps RJ45; DP/HDMI Combo source port; USB-B HID port; AES 256 CBC HID decryption; NIAP certified Isolator
SKCX01PHR-M	Neous Copper KVM Matrix RX with Linked Isolator	Video 4K30Hz; Enforced operation with Isolator; 10Gbps RJ45; DP/HDMI Combo console port; 2x USB-A HID console port; AES 256 CBC HID encryption; NIAP certified Isolator
MCV11EC-M	Neous Video Matrix Controller	Up to 50 end points
MCK11EC-M	Neous KVM Matrix Controller	Up to 50 end points

SPECIFICATION

MODELS	SVFX10PH-M	SVCX10PH-M	SKFX10PH-M	SKCX10PH-M
NEOUS TRANSMITTER				
Video	DP/HDMI 2.0 up to 4K 30Hz 4,4,4			
Local Video	HDMI			
USB HID	N/A	N/A	USB HID Type B	USB HID Type B
Ethernet	N/A	10 Gb for Video/Audio	N/A	10 Gb for Video/Audio
Fiber	SFP+ port	N/A	SFP+ port	N/A
NEOUS RECEIVER				
Video	DP/HDMI 2.0 up to 4K 30Hz 4,4,4			
USB HID	N/A	N/A	2 x USB HID USB type A	2 x USB HID USB type A
Ethernet	N/A	10 Gbps for Video/Audio	N/A	10 Gbps for Video/Audio
Fiber	SFP+ port	N/A	SFP+ port	N/A
ADDITIONAL SECURITY SPECIFICATIONS				
Video	Unidirectional isolated video			
USB HID	Unidirectional isolated USB HID			
Encrypted USB HID	AES 256 CBC			
Additional	<ul style="list-style-type: none"> • 802.1X • NAC • SSL 			

NEOUS CONTROLLER	
Ethernet	1 Gbps RJ45 port
Video	HDMI
USB	2 x USB A
Security	HTTPS
Functionality	<ul style="list-style-type: none"> • KVM switching • Video only switching • Tx/Rx configuration • Permissions management • NAC



SKCX10PHT-M

SVFX10PHR-M

For more information, please contact info@highseclabs.com or go to www.highseclabs.com