



HSL Company Profile



About **HSL**

High Sec Labs is a leading manufacturer of cyber security products, protecting secure and sensitive organizations.

HSL's cyber mission is to create products that withstand attacks by even the most sophisticated attacker.

HSL and its customers believe in **HW** and **physical isolation** as a security mechanism, instead of SW and statistical tools.



HIGHSECLABS COMPANY PROFILE

- Founded in 2008, privately owned
- Locations in Israel and the USA, 300 employees, 100 R&D Positions
- HSL possesses all development expertise internally (HW, SW)
- Secure manufacturing facilities & supply chain in Israel and the US
- Multiple international certifications - NIAP/Common Criteria/TEMPEST
- IP – Over 70 patents granted, dozens more submitted



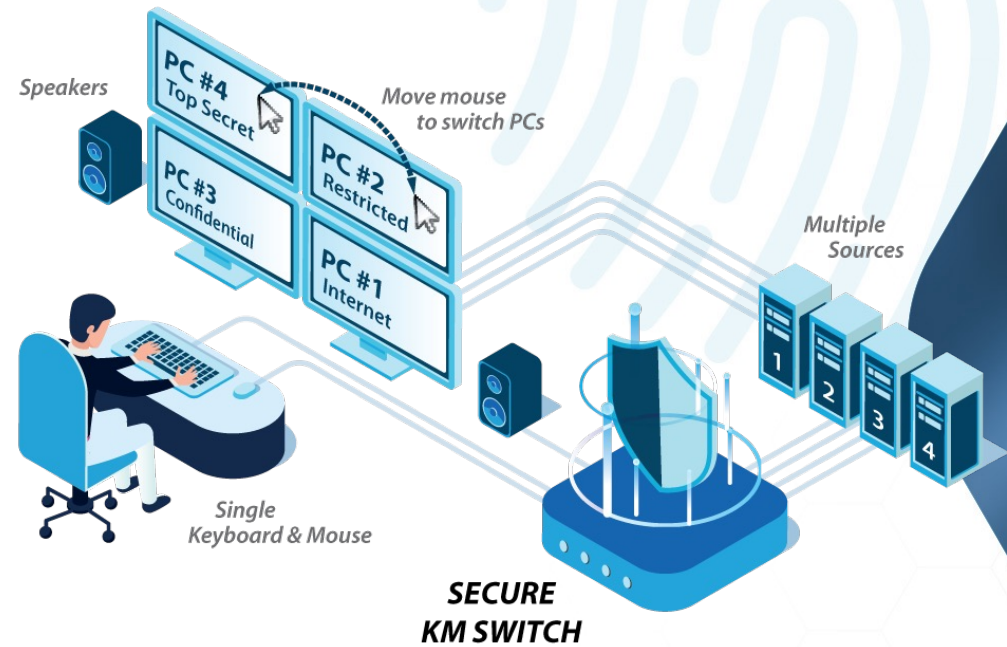
AREAS OF ACTIVITY

HSL creates HW-based cyber-security solutions for organizations with multiple isolated networks of different classifications.

HSL's products:

- Protect networks from data leakage & malicious code
- Securely allow cross-domain data transfers
- Improve workflow and simplify tasks

HSL operates globally with a broad off-the-shelf product portfolio that is **customizable** as required. Products are TAA/BAA compliant, manufactured using secure supply chains.



PRODUCT FAMILIES AND USE

Product Families	Control Room	Meeting Room	Secure Desktop	Defense
<u>KVM Switching Family</u>	✓	✓	✓	
<u>Neous KVM/AV Over IP Matrix</u>	✓			
<u>Cross Domain Solutions</u>	✓		✓	✓
<u>KVM and Video Isolators</u>	✓	✓		
<u>KVM and Video Extenders</u>	✓	✓		
<u>Audio Diodes</u>		✓	✓	
<u>Rugged Products</u>				✓
<u>Babylon Secure Communications</u>	✓	✓	✓	

VERTICALS

Healthcare



Command & Control



Banking & Trading



Defense



Government & Critical Infrastructure



KVM SWITCHING SOLUTIONS

- HSL's solutions prevent exploiting vulnerable peripherals from leaking information between classified and non-classified networks.
- Air gapping effectively protects against cyber threats in a classified environment yet creates usability issues.
- HSL's solutions protect and isolate peripherals and networks while permitting an easy and intuitive user experience in an air gapped environment.
- Available in secure and commercial versions

KVM Switches



Mini-Matrix Switches



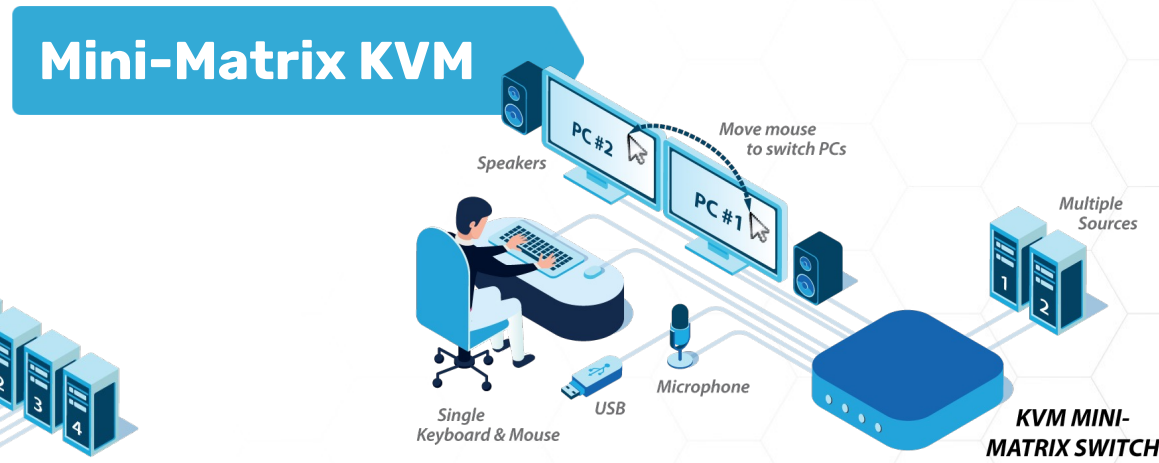
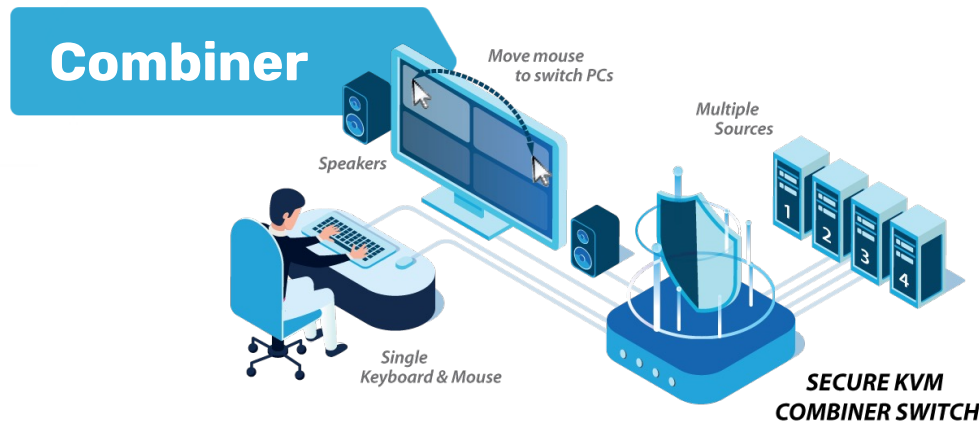
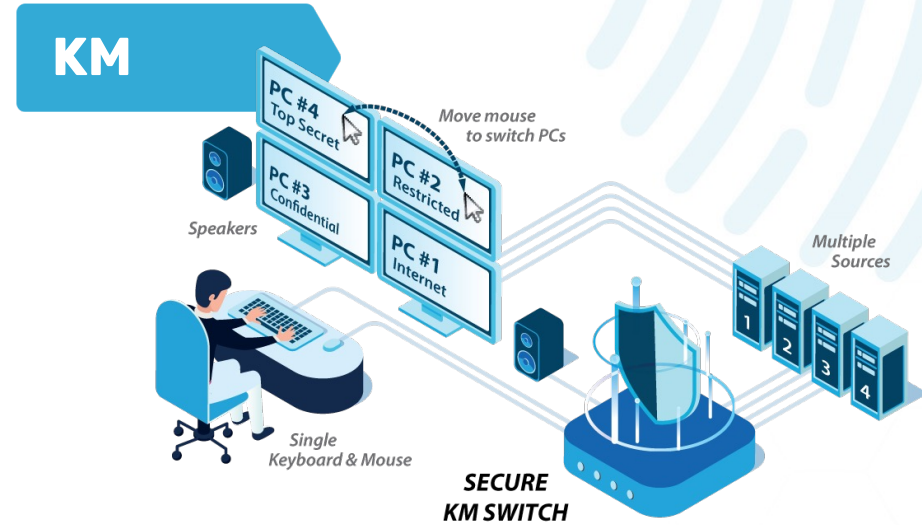
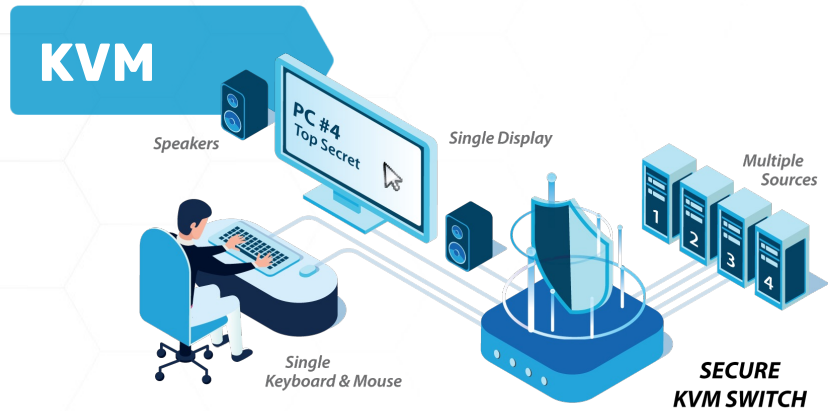
KM Switches



Combiner Switches



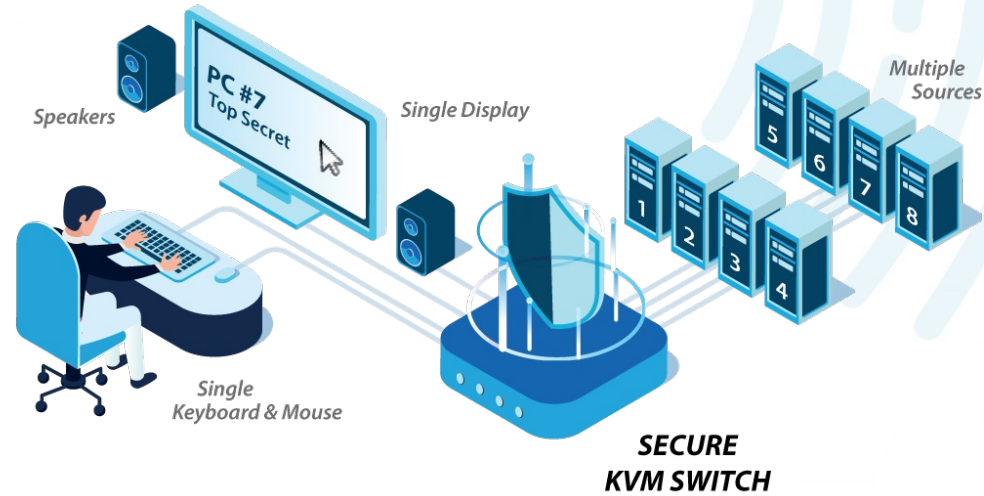
KVM SWITCH FAMILY



SECURITY HIGHLIGHTS

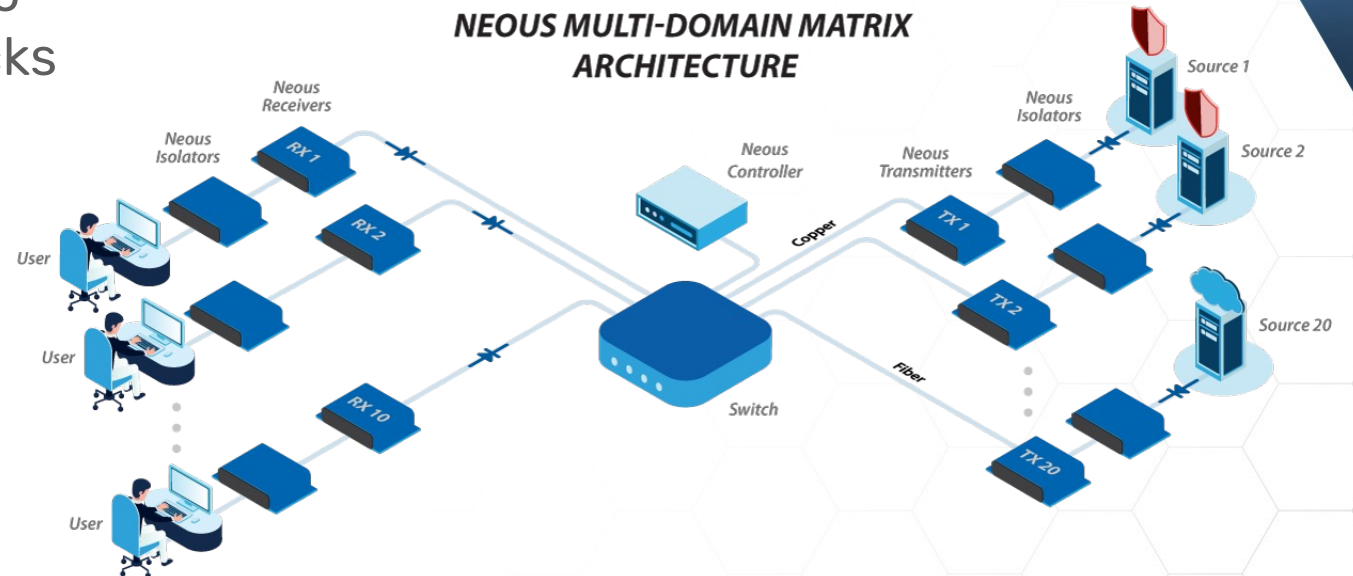
The need for a secure switch:

- Interaction with multiple computer sources on multiple domains of different classification levels, including Internet
- Peripheral devices have security vulnerabilities that are exploitable for:
 - Data leaks, signaling, & malicious code attacks
- Common Criteria provides an internationally accepted standard for sharing peripherals between computers
- NIAP (National Information Assurance Partnership) is the NSA's certifying body in the US.
- HSL's products are compliant with the latest Common Criteria/NIAP requirements.
- TEMPEST is an advanced requirement for defense applications. HSL has a TEMPEST compliant product line.



NEOUS SECURE MULTI-DOMAIN MATRIX ARCHITECTURE

- **SECURE** isolated multi-domain KVM/Video matrix solutions
- Prevents data leakage between domains in a **cross-domain/multi-classification** environment
- Scalable solutions for KVM & video matrix using a set of building blocks and software applications.
- HID encryption: AES 256 CBC
- Network security:
 - 802.1x NAC
 - MAC filtering
- **NIAP/Common Criteria PP4.0 Certified Components**



CROSS DOMAIN SOLUTIONS

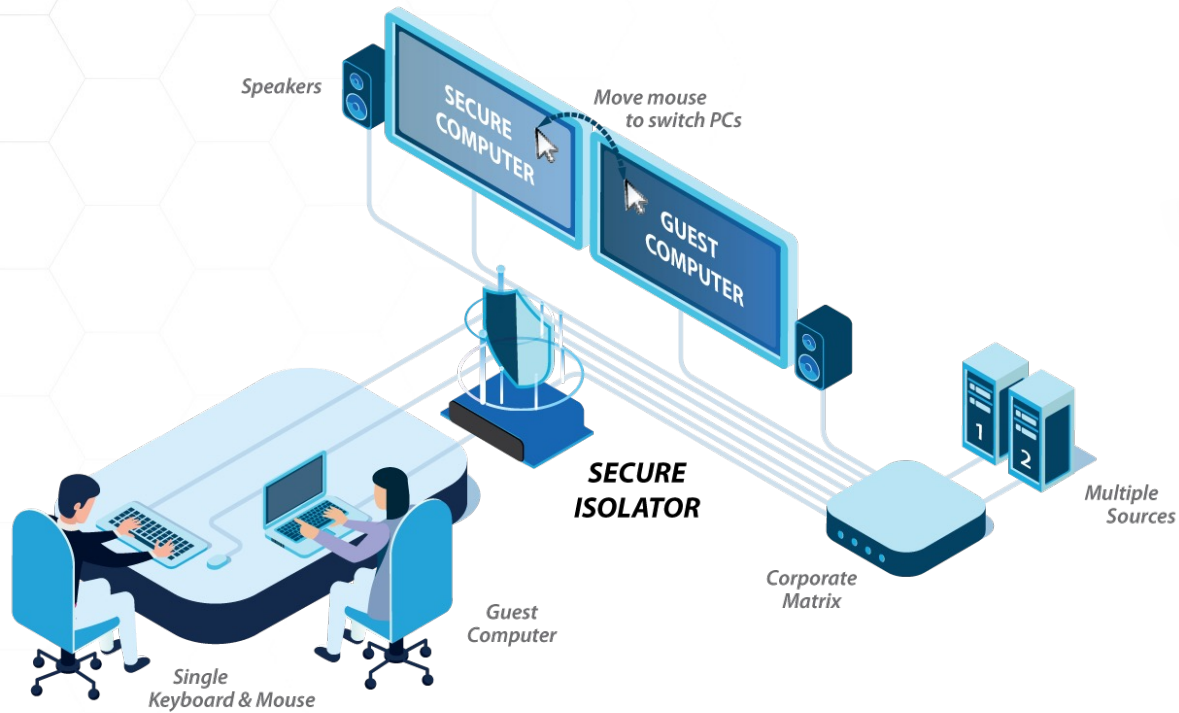
- Application **specific** – products isolate and filter specific applications or protocols
- **Cost effective** – designed for desktop installation & workflow improvement
- **HW-based security & filtering** – rely on HW instead of SW or statistical tools
- **No infrastructure changes needed** – easy to install & available for immediate deployment
- **Products include**
 - RS232, XML, JSON Diodes & Filter
 - File Transfer Diode
 - H.264/5 Diode & Filter
 - RDP Diode & Filter



RS-232 Data Diode & Filter



ISOLATORS



Mini Video Isolators



Galvanic Isolator



Video Isolator



Video & HID Isolator



Secure, NIAP PP4.0 certified Isolators filter computer video and USB data and enforce unidirectional data flow. This prevents shared peripheral-threats from compromising network security. The Isolator ensures that only permitted data is transferred from the source to the destination.

EXTENDERS

- **BAA/TAA Compliant**
- **Diversified Portfolio**
 - Fiber or copper extension
 - DP or HDMI
 - 4K 30Hz or 4K 60Hz
 - USB 2.0
 - USB 3.0
 - USB C extension
- **Extra Long Range**
Using either Fiber (10KM) or Copper (100m) to connect between source and peripherals.
- **DP/HDMI Combo Connector**
Allows connecting both type of cables – Display Port and HDMI, including format conversion.

- **POE & POC Support**
Power an Extender RX via POE using 48V connected to TX unit, or POC using 12V connected to the TX or RX unit, depending on the model.

Fiber Extenders



Copper Extenders



PoE Extenders



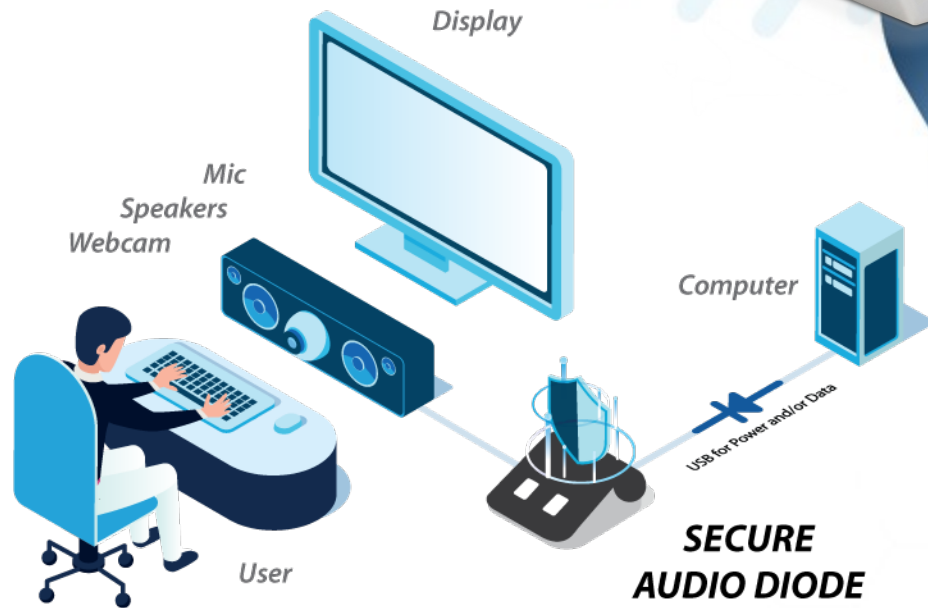
PoC Extenders



AUDIO DIODES

Audio Diodes:

- Keep the microphone/webcam in a normally closed state
- Prevent repurposing a loudspeaker as a microphone
- Block data exfiltration high frequency transmissions

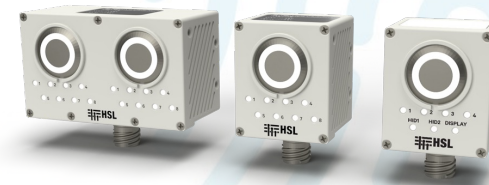


The Audio Diode mitigates the risks of using peripheral audio devices in organizations with multiple isolated networks. The device connects between a source PC and a peripheral audio device (speaker/headphone or microphone) and prevents attackers from exploiting audio data leakage vulnerabilities.

RUGGED FAMILY



KVM Switches



Remote Controls



Matrix Switches



Combiner Switches

- MIL-SPEC 810, 1275, 461, IP67 Compliant.
- NIAP PP4.0 PSD Compliant
- TEMPEST Level A Compliant



Extenders

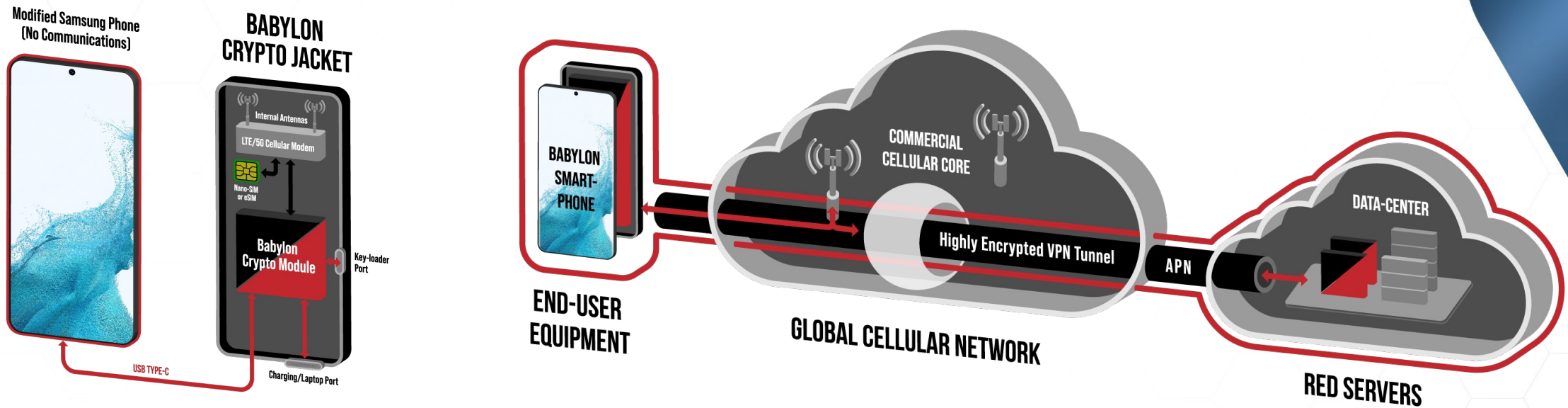


Asset Tracking



An off-the-shelf family of customizable products for military environments

BABYLON SECURE CELLULAR



Babylon:
*A military-grade encrypted communication system
using public cellular networks*

ACCESSORIES



Secure Card Readers



KVM, USB-C Cables



Remote Controls



USB Locks



HDMI Splitters



Rack Mounts



Power Distribution



USB-C Docking



Thank You

For more info:



info@highseclabs.com
www.highseclabs.com