

UNCLASSIFIED

# A Suite of Rugged Cyber- Secure Products

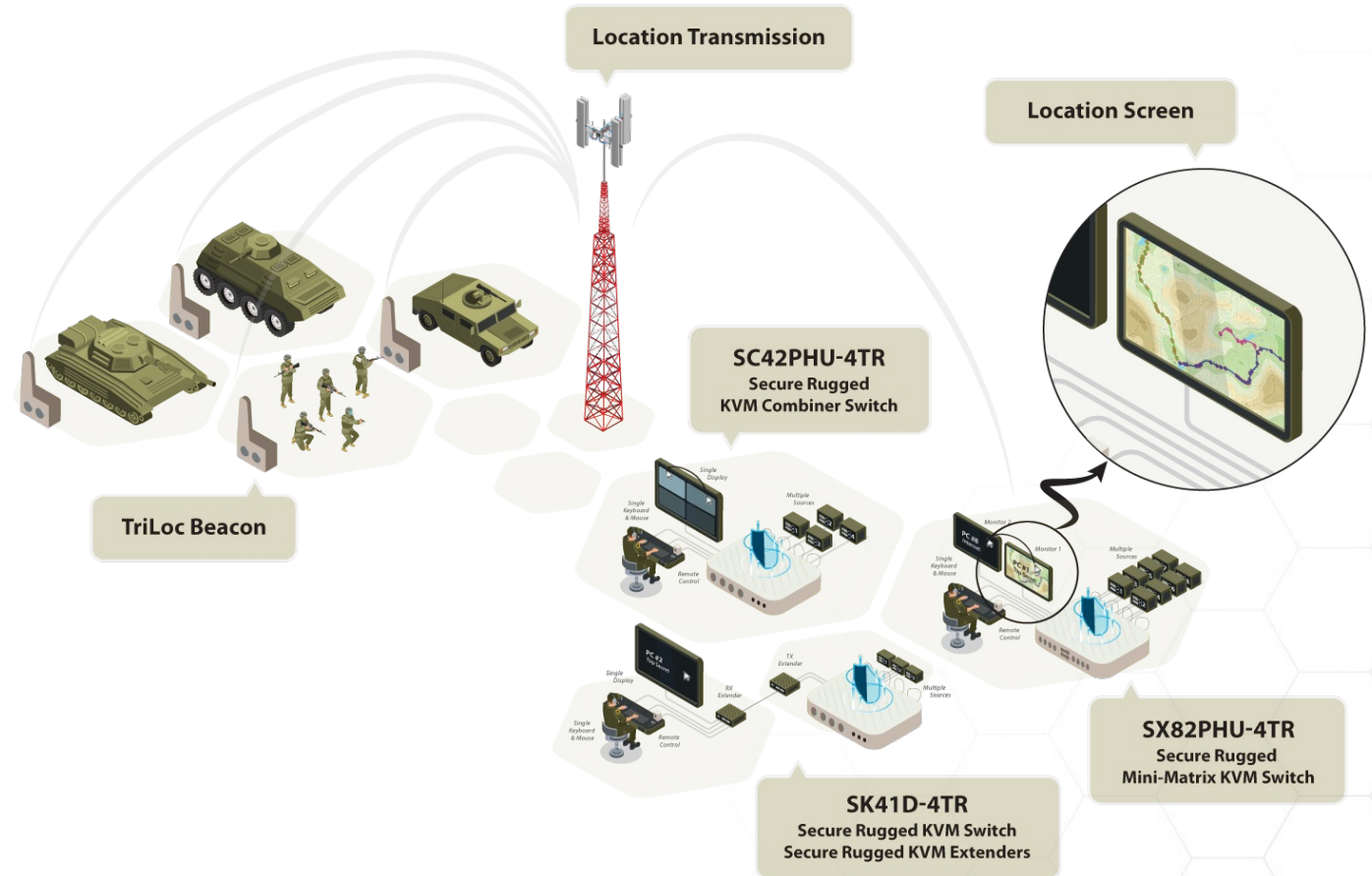
A peripheral sharing product suite for field conditions in a multi-classification domain network environment





# RUGGED CROSS-DOMAIN PRODUCT SUITE

- Brings HSL's leadership in network isolation to the battlefield.
- Interact with multiple computers of different classification levels easily and securely.
- Improve situational awareness, workflow, access to information, communications and asset-monitoring
- NIAP/Common Criteria PP4.0, TEMPEST Level A, MIL-STD: 461, 1275, 810 compliant
- The suite includes products for:
  - KVM switching and multi-view video combining and scaling & extenders
  - Locating and monitoring the position of assets (vehicles, equipment, soldiers)





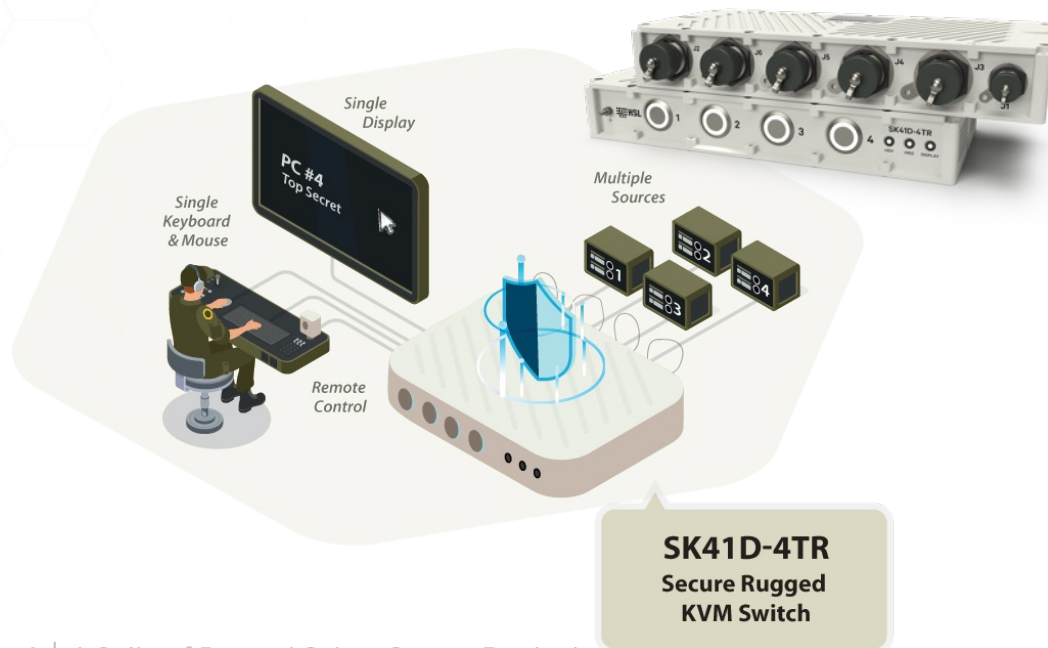
# Rugged KVM Switching and Extenders



# RUGGED & SECURE KVM FAMILY

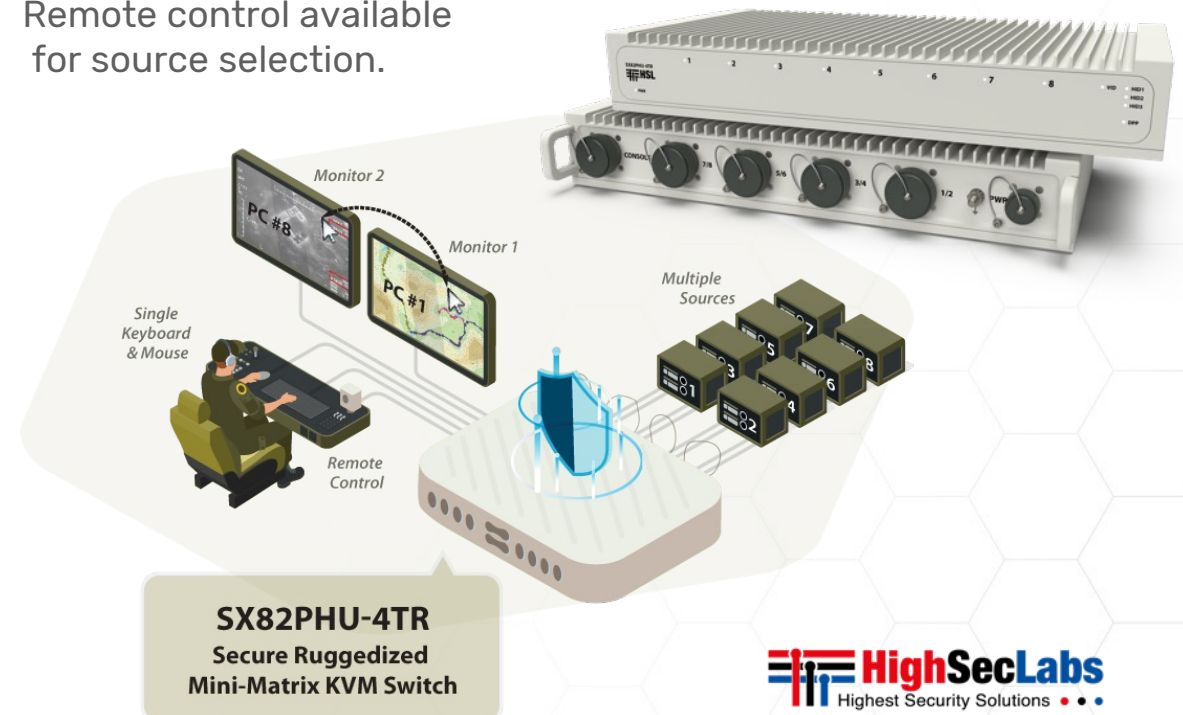
## KVM Switches

- Share a single set of peripherals (mouse, keyboard, display) across multiple computers.
- Switch the entire set of peripherals as a group between sources by pushing the KVM buttons or remote control.



## Matrix Switch

- Any combination of host video sources can be routed to the two console displays (one source per console display)
- Dragging the mouse to a console display associates the mouse and keyboard with the displayed source computer (automatic switching with no need to press a button).
- Remote control available for source selection.

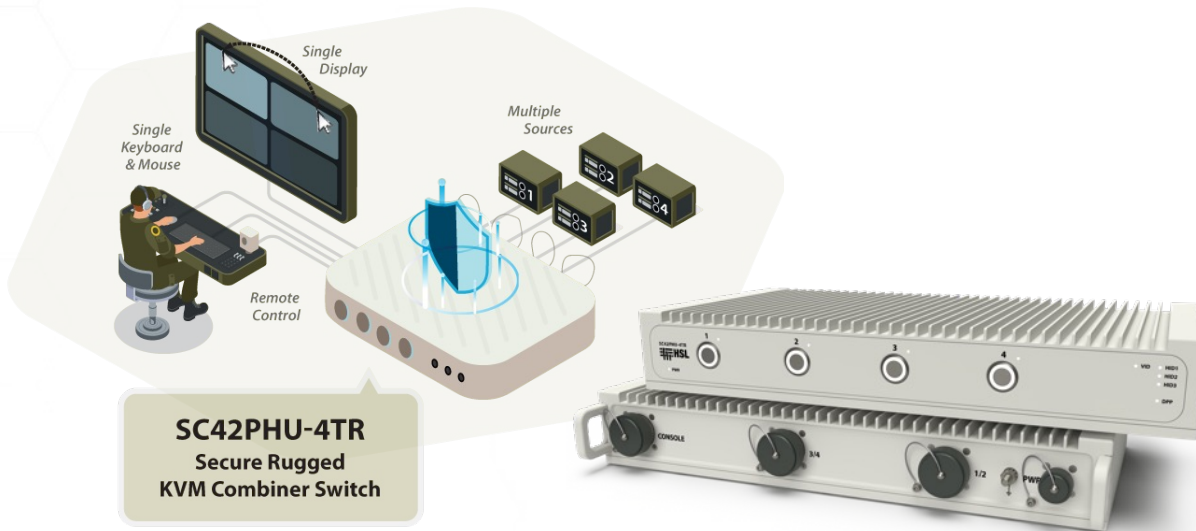




# RUGGED & SECURE KVM FAMILY

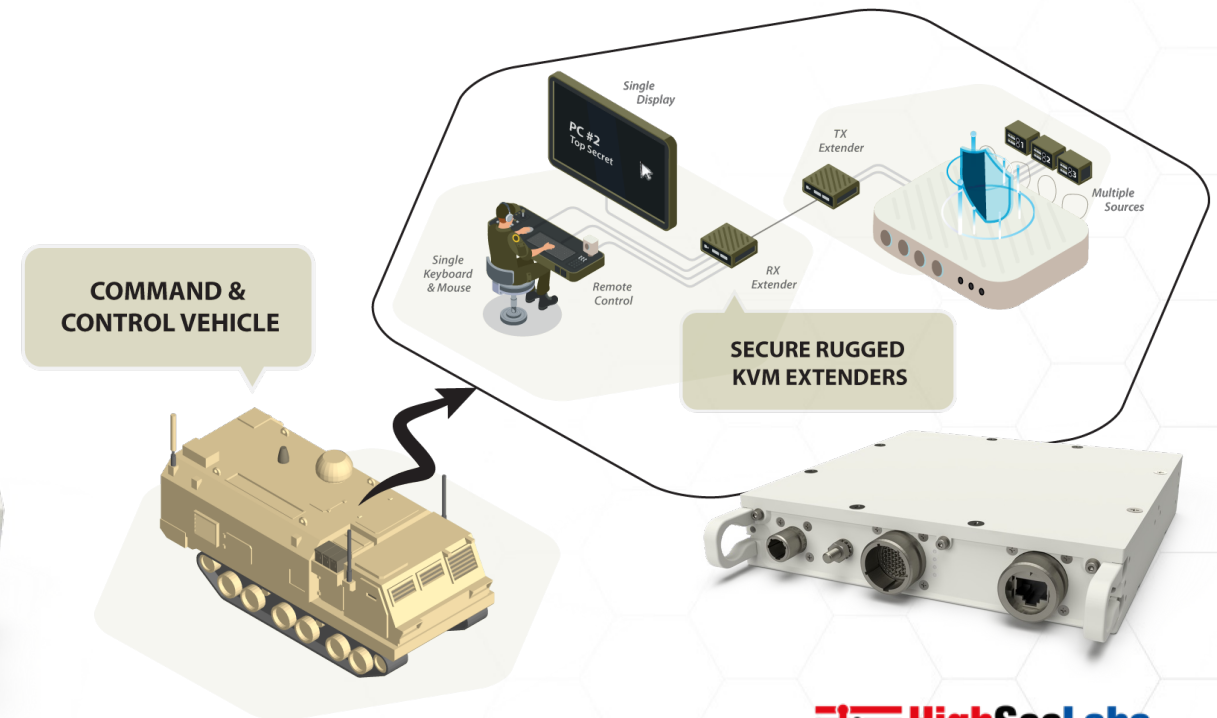
## Combiner

- Video sources can be combined and scaled to display up to 8 sources on the 2 console screens.
- Drag the mouse to a video window to give the keyboard & mouse control over that source.
- Video sources can be scaled and dragged between the 2 console screens using the mouse.



## Extenders

- Extend the host or console video, USB and remote control signals across fiber or copper cable
- Simplifies installation & workflow





# RUGGED KVM SUITE – COMPLIANCE

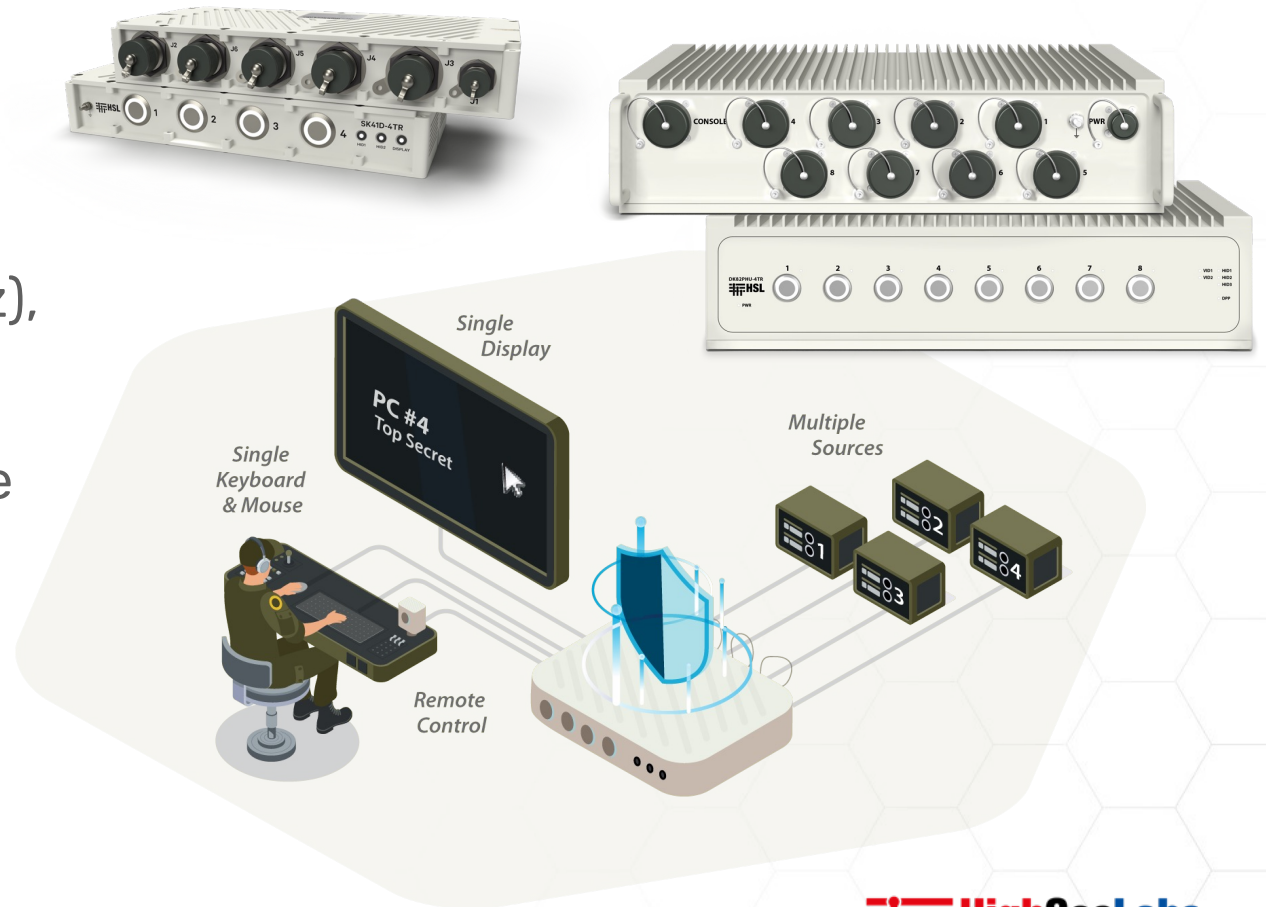
- Fully rugged and designed for use in deployed military vehicles and C2 centers.  
Compliant to:
  - MIL-HDBK-216
  - MIL-STD-810
  - MIL-STD-1275
  - MIL-STD-461
- 65,000 hours MTBF
- Fully secure – No data leaks between channel-isolated sources
  - Compliant with NIAP/Common Criteria PP4.0 for PSD (Peripheral Sharing Device)
  - TEMPEST Level A compliant
- IP67 compliant illuminated buttons.  
NVG option available





# RUGGED KVM SUITE – KVM

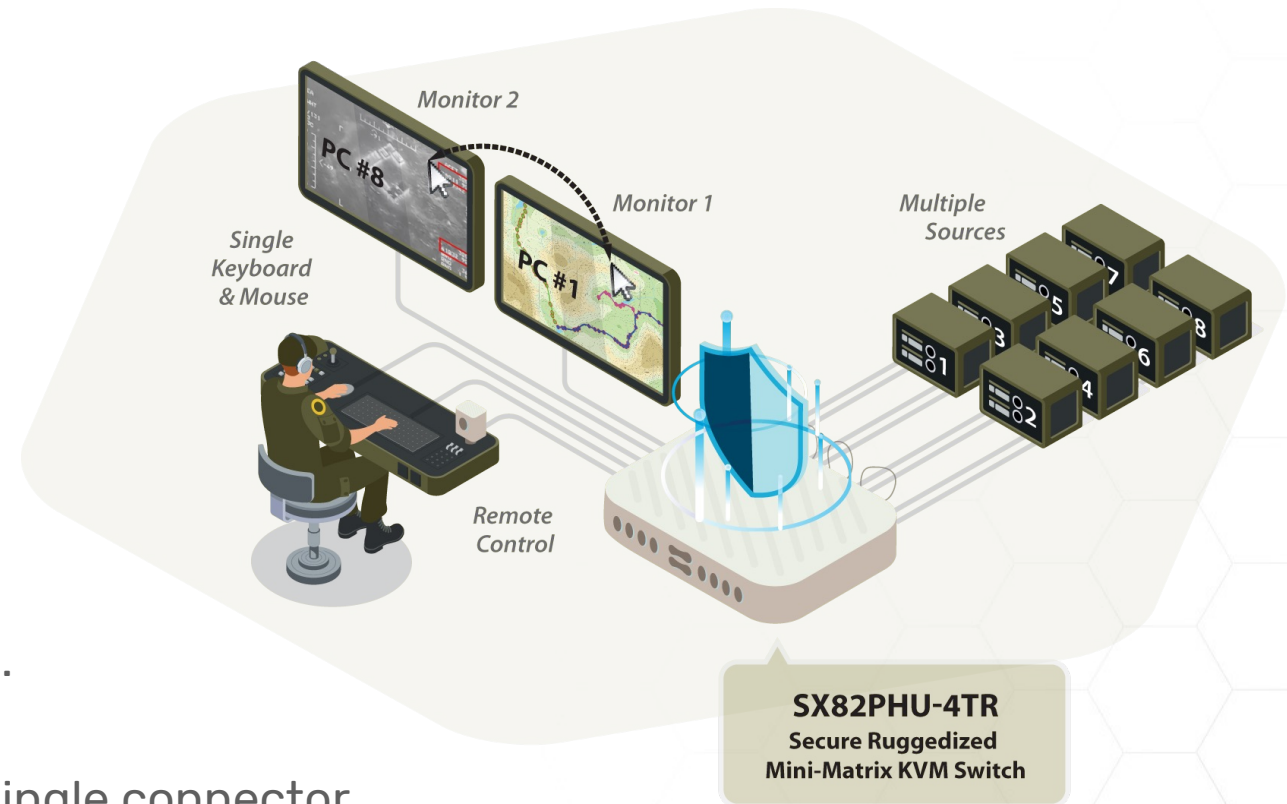
- 4-port SH and 8-port DH versions
- Video resolutions up to 4K@30Hz or 3440x1440@60Hz
  - DisplayPort, DVI-D (1920x1200@60Hz), HDMI supported
- Mouse, KB, CAC and optional RC via single connector.
- Select sources using RC or buttons





# RUGGED KVM SUITE – MATRIX

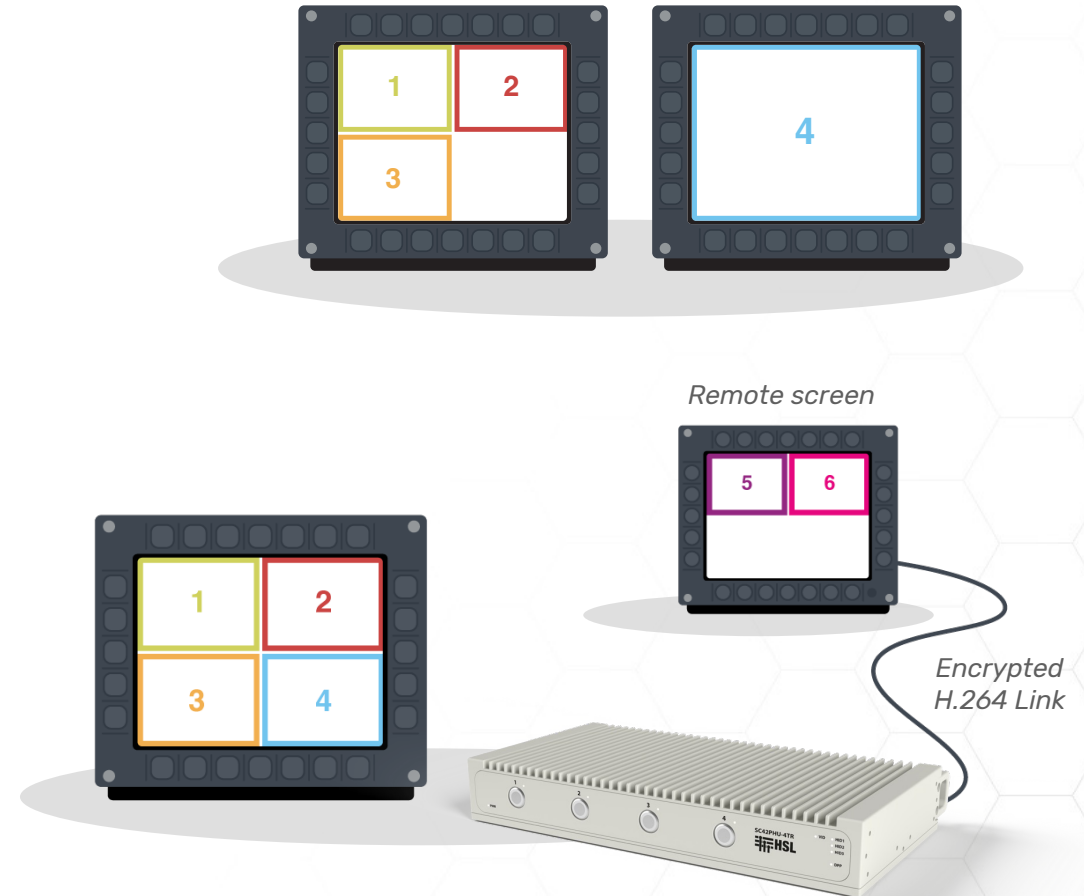
- 8 / 4 source inputs, 2 console displays
  - Display any source on either of the console displays.
- DP/HDMI supported
- Video resolutions up to 4K@30Hz or 3440x1440@60Hz
- Switch smoothly between displayed hosts via mouse/trackball movements
  - Keyboard, CAC become associated with the host computer selected by mouse.
- Remote control for source selection
- Mouse, KB, CAC reader & remote control via single connector.
- Configurable as a single-head or dual-head KVM.





# RUGGED KVM SUITE – COMBINER

- Configurations designed for vehicle deployment:
  - 4/8/16 host, 2 display screens
    - Display any combination of 4/8/16 video sources across 2 display screens
- Option: H.264 encoded video stream
  - Ethernet encrypted **H.264 streaming link**
  - H.264 stream comes instead of 2<sup>nd</sup> console display
- Video supported up to 4K@30Hz or 3440x1440@60Hz
  - Both DisplayPort and HDMI supported

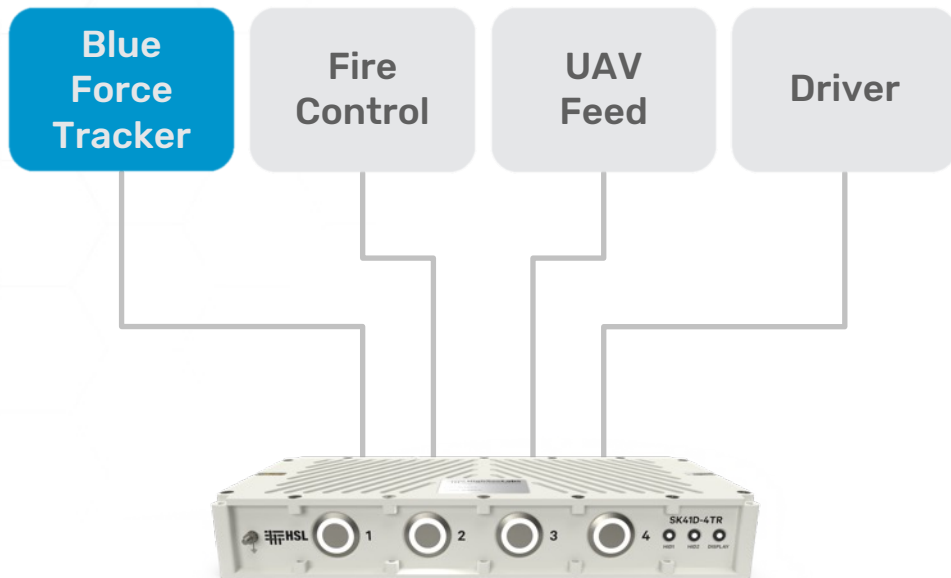


# Use Cases



# USAGE SCENARIO - KVM

**Single Display, Monitoring/Controlling up to 4 Onboard Systems.**



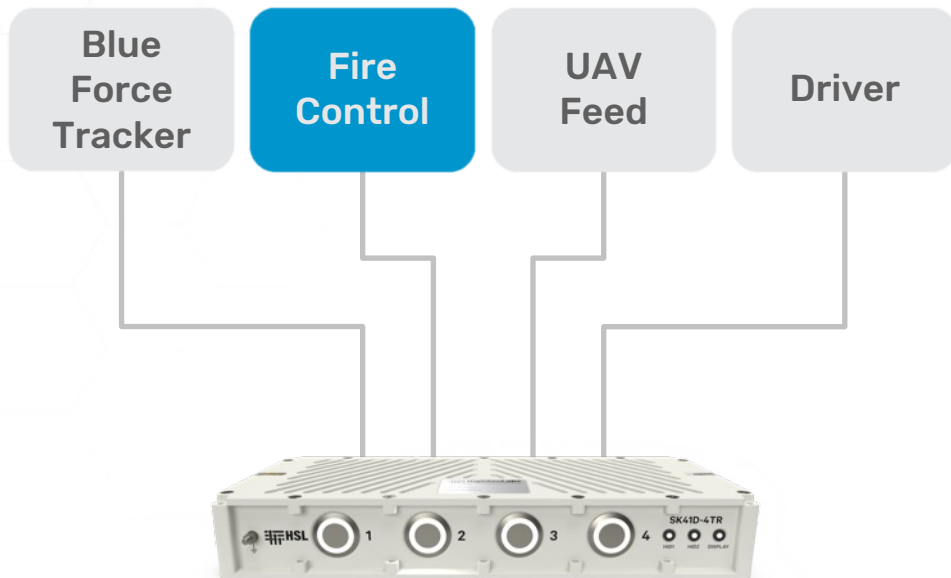
**KVM Switch Front Panel**



**1. Blue Force Tracker**

# USAGE SCENARIO - KVM

**Single Display, Monitoring/Controlling up to 4 Onboard Systems.**



**KVM Switch Front Panel**

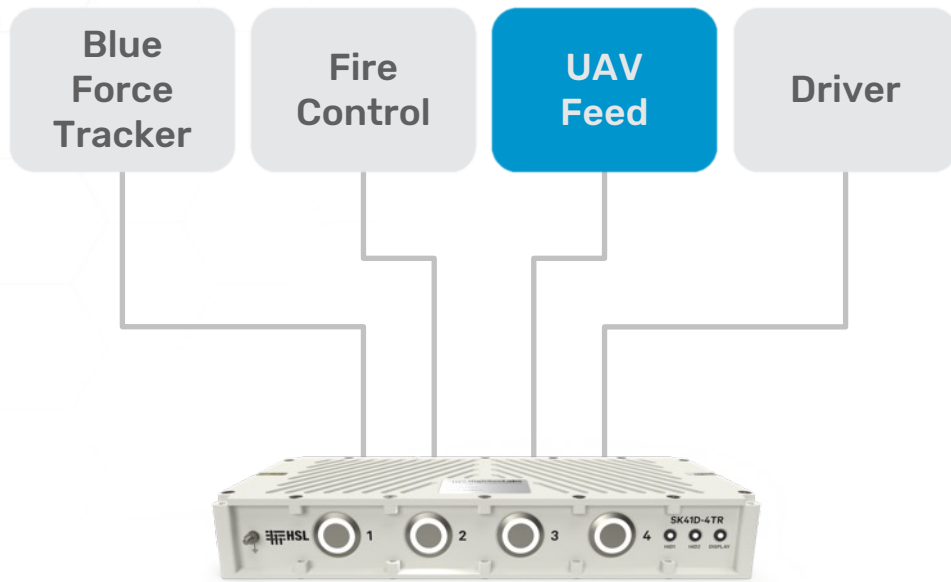


**2. Fire Control**



# USAGE SCENARIO - KVM

**Single Display, Monitoring/Controlling up to 4 Onboard Systems.**



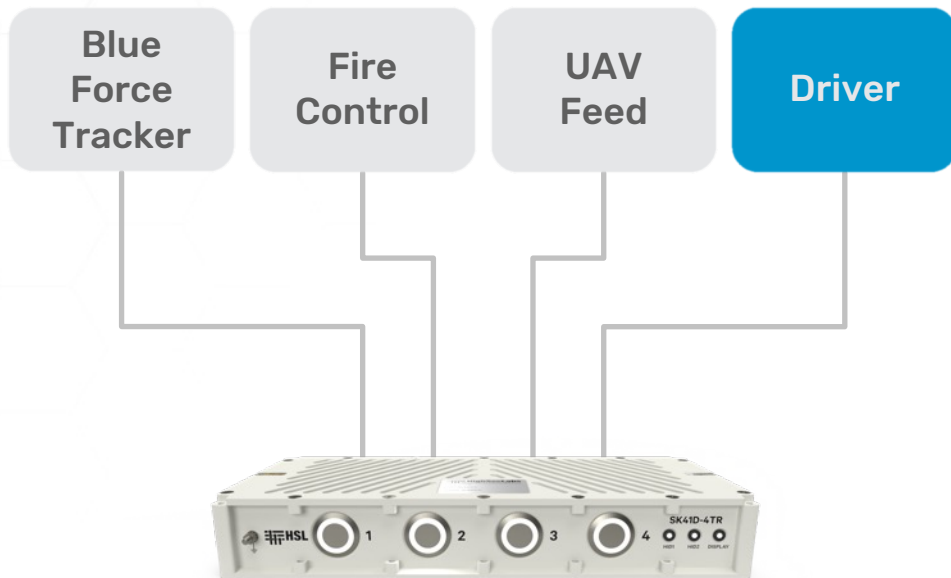
**KVM Switch Front Panel**



**3. UAV Feed**

# USAGE SCENARIO - KVM

## Single Display, Monitoring/Controlling up to 4 Onboard Systems.



**KVM Switch Front Panel**

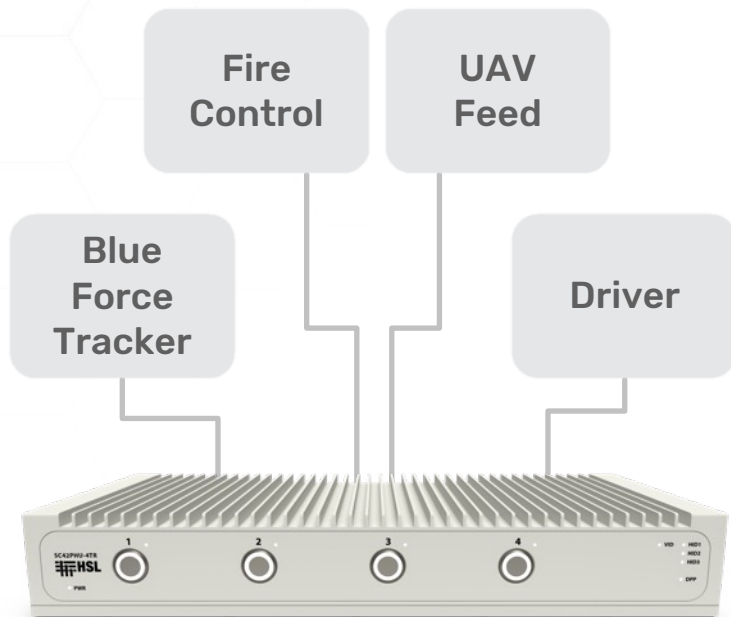


**4. Driver's Camera**

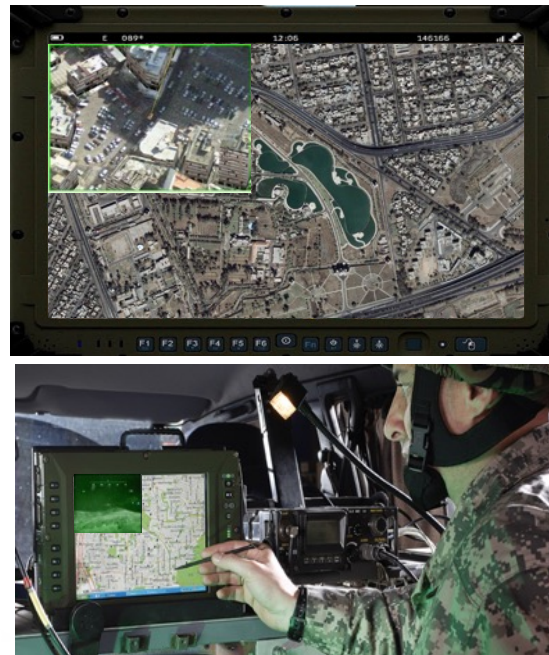


# USAGE SCENARIO - COMBINER

- A **single** crew position can Monitor, Control and Display **four** onboard systems. The configurable display can show one, or all systems simultaneously.



**Combiner KVM Switch**



**Possible View 1**



**Possible View 2**





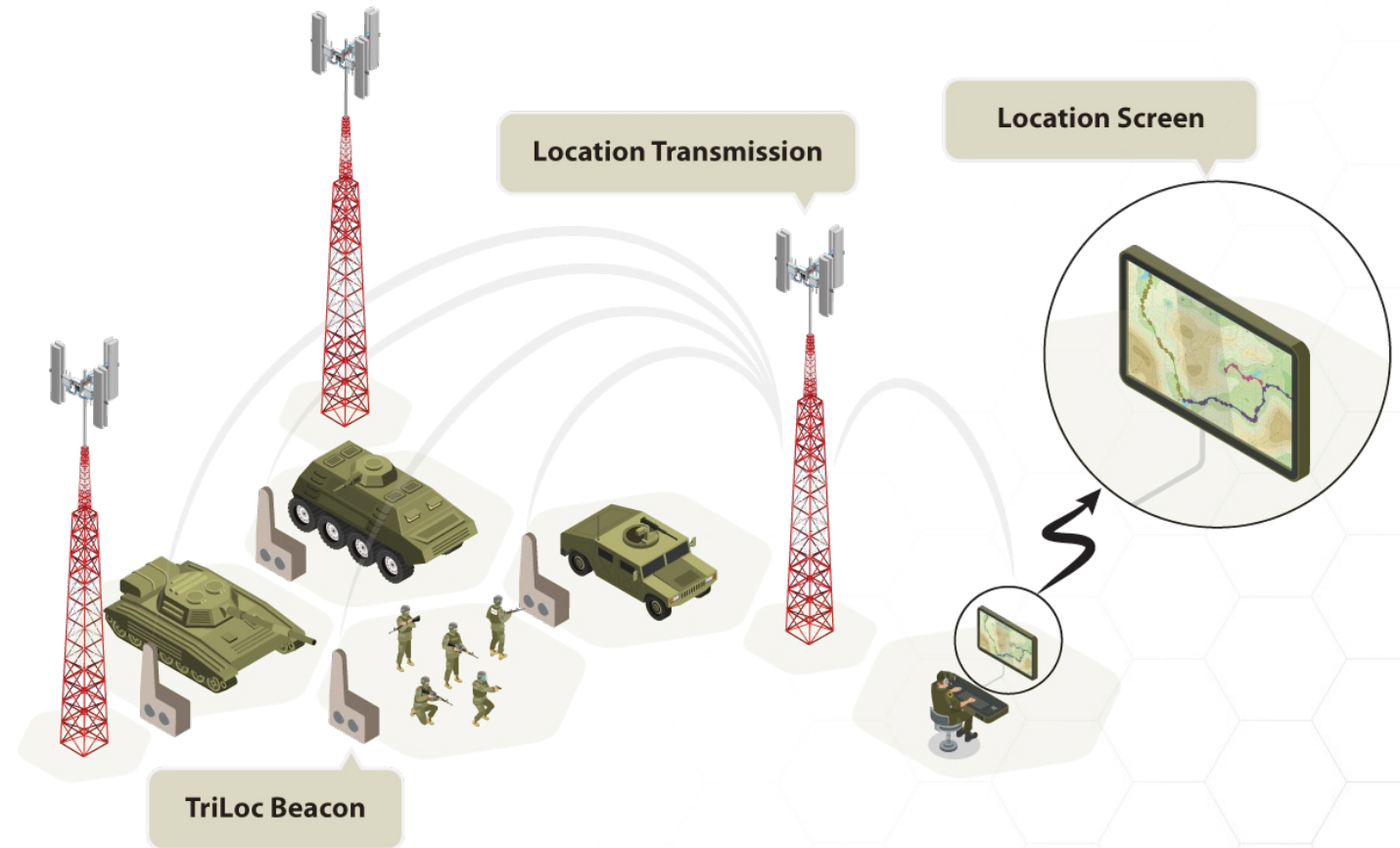
# TriLoc Beacon™ Asset Tracking

Location Information in  
GPS-Denied Environments



# SECURE ASSET TRACKING SOLUTION

- A scalable solutions for tracking and locating field-deployed assets.
- Suitable for **vehicles, equipment and personnel**. Appropriate for military as well as civilian use (e.g. emergency response roll-outs – floods, fires etc.)
- Uses GPS or **cellular triangulation** in GPS-denied environments
- Extended battery life for long-term deployment in the field
- Server-side location and tracking application



# TRILOC BEACON ASSET TRACKING SYSTEM COMPONENTS

- **TriLoc Beacon Transmitter**
  - Acquires position using GPS or cellular triangulation. Encrypts position information and transmits to TriLoc server.
- **TriLoc Server Application**
  - Receives and decodes position information. Displays asset location and historical movements.





# SUMMARY

- Use in any environment, with or without GPS
- Public cellular network triangulation technology
- Energy Smart power management for 6 months of use
- MIL-STD spec for use under all field conditions
- Small and light for use by personnel, vehicles, equipment
- RSA encryption of position information
- Server-side application for displaying real-time & historical position information.



# Thank You

For more info:



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