

# THE HSL SECURE EXTENDERS

Ensuring unidirectional data flow for presentation solutions



- **NIAP Common Criteria PP4.0 Compliant**

HSL KVMs qualify to the latest NIAP Common Criteria Protection Profile version 4.0 (PP4.0) certification for Peripheral Sharing Device (PSD) devices.

- **Extra Long Range**

Using either Fiber (10KM) or Copper (100m) to connect between source and display.

- **DP/HDMI Combined Connector**

Allows connecting both type of cables – Display Port and HDMI including format conversion.

- **POE Support**

Power Extender Receiver via POE using 48V connected to TX unit.

- **Made in the USA, BAA and TAA Compliant.**

# The HSL Extenders Family Overview

HSL SECURE EXTENDERS

## Device Types:

- Secure Extended Isolators
- Non-Secure Extenders

## Accessories:

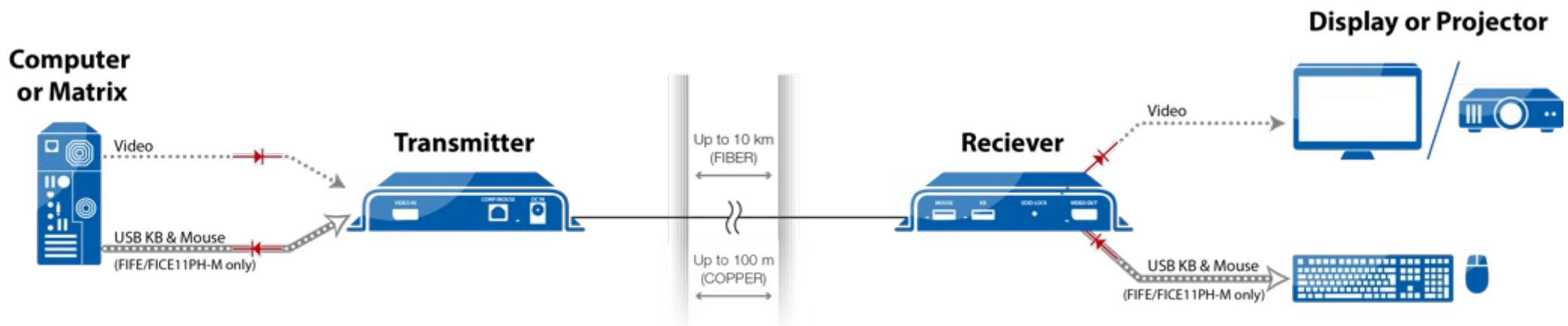
- Rack Mount Kit
- Power Distribution Unit for Isolators and Extenders - PDUI



# Secure Extended Isolator

HSL SECURE EXTENDERS

**HSL Secure, NIAP PP4.0 Compatible Extended Isolators** enable secure unidirectional and filtered long-distance extension of computer video and keyboard/mouse signals, while preventing vulnerable peripherals from compromising network security.



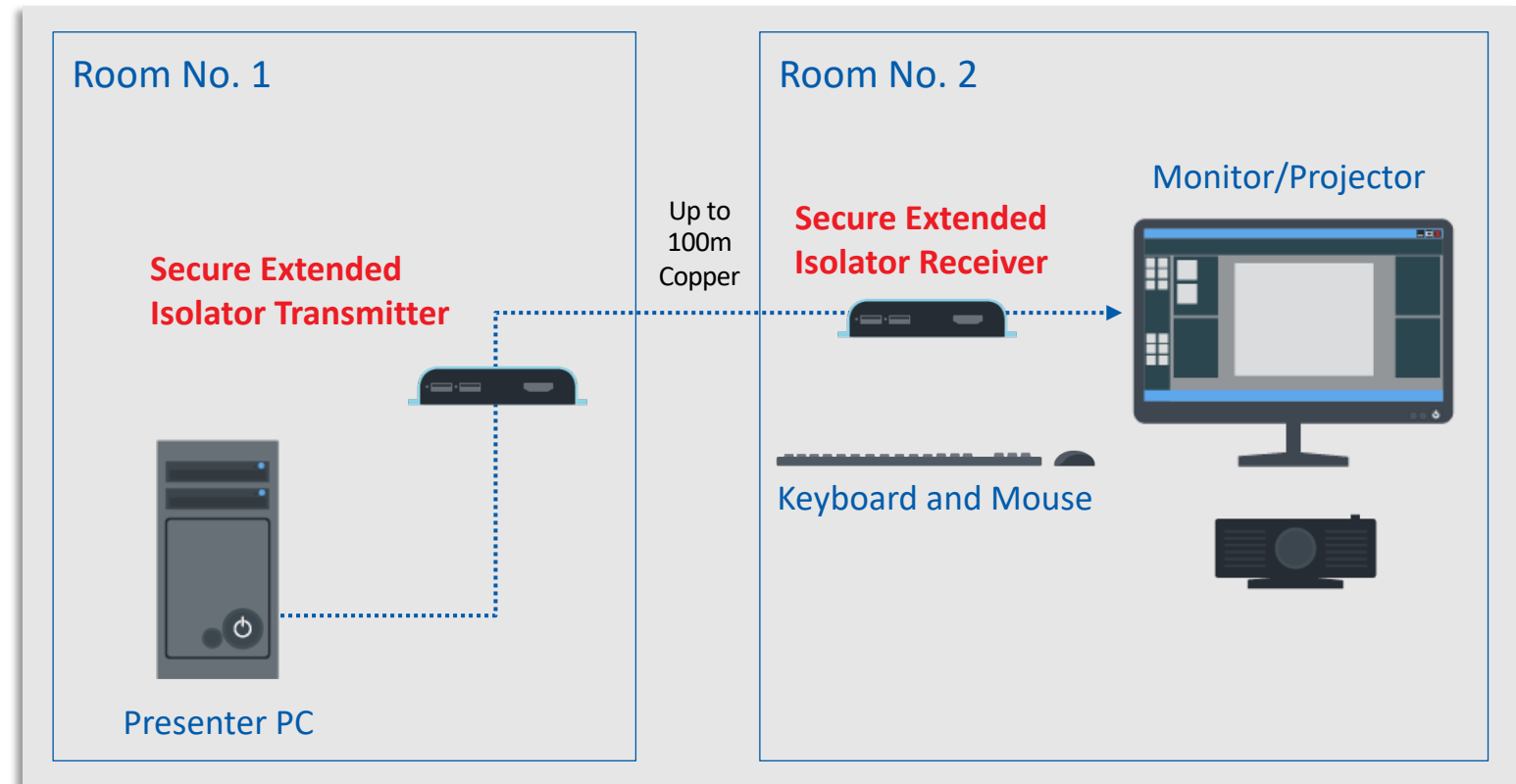
# HSL Secure Extended Isolator Use Cases

HSL SECURE EXTENDERS

## Use Case #1 – Remote PC

Remotely project to monitor or projector: The presenter with a PC projects video to a remotely located room via an Extender.

The HSL Secure Isolated Extender ensures security and protection to the connected PC.



The Secure HSL Extended Isolators have the KVM ability to remotely transfer not only video and audio, but also the keyboard and mouse. This enables securely operating the remote PC from the Monitor/Projector side. The Keyboard/Mouse USBs are also unidirectional and secure.

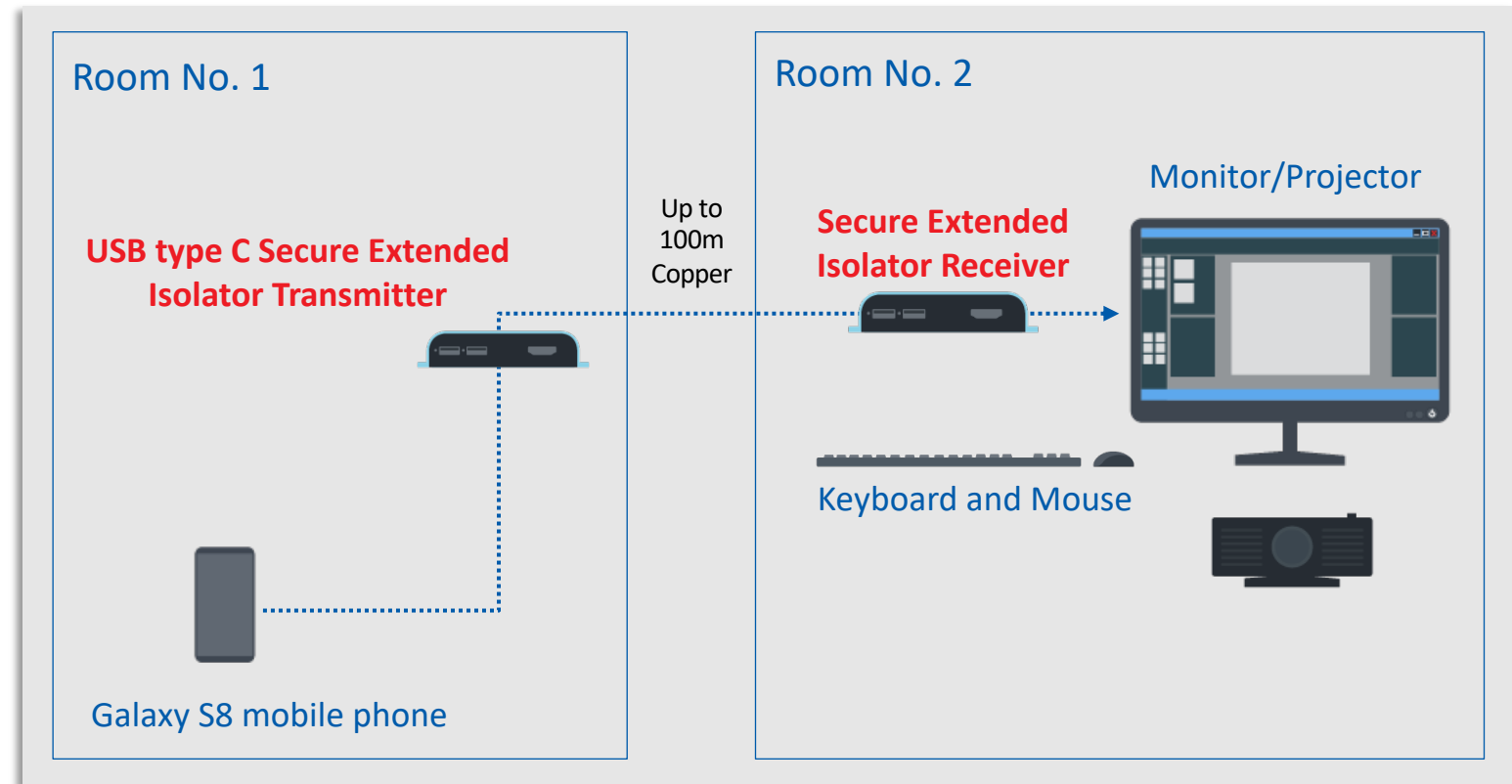
# HSL Secure Extended USB Type-C Isolator Use Cases

HSL SECURE EXTENDERS

## Use Case #2 – Remote Mobile Devices

Use remotely a smartphone through the Extended Isolator.

Often in secure environments mobile devices are not allowed to be used inside.



The Secure Extended Isolator with USB Type-C port allows to connect securely to the phone that is left outside the secure room, without compromising the security of other devices in the room.

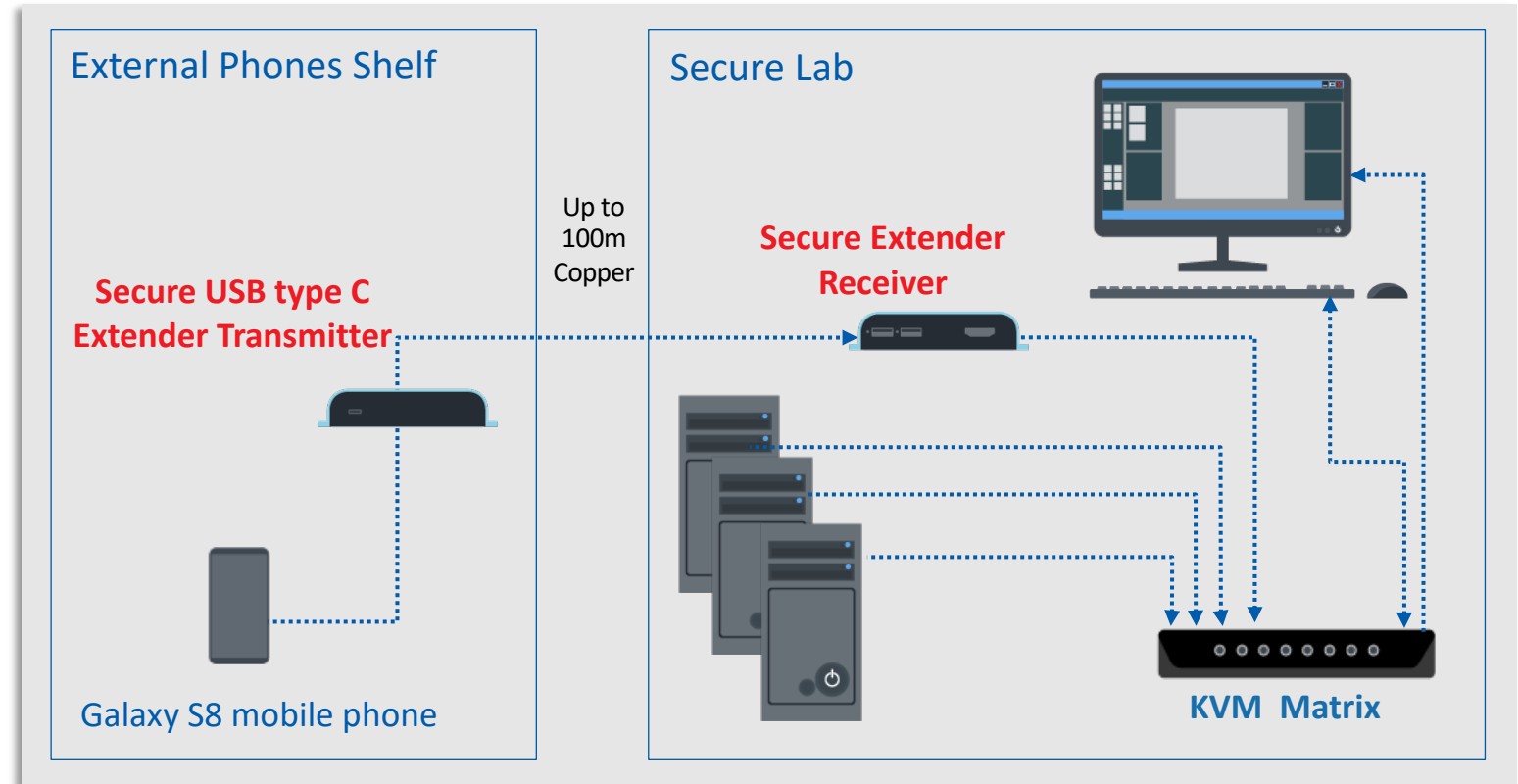


# HSL Secure Extended Isolator Use Cases

HSL SECURE EXTENDERS

## Use Case #3 – Remote Mobile to a Secure Room with KVM Matrix

The mobile phone can also be connected through the Secure Extender to the KVM Matrix in the secure room and be operated from there with the same set of Display, KB & Mouse, and the devices in the room will be fully isolated from the Smartphone that is connected to a non Secure Network.



# Secure Extended Isolator – Device Features

HSL SECURE EXTENDERS

- Fiber or copper cables connecting options, enable connection of up to 10km between the source and the console
- Using Valence high performance HDBaseT technology that provides zero-latency between transmitter and receiver units
- DP/HDMI combined connectors provide more flexibility in the connected devices, from both sides
- High quality video support at 4K 30hz resolution
- DP/HDMI combined connector  
Allows connecting both type of cables – Display Port and HDMI





# Secure Extended Isolator Copper Models

HSL SECURE EXTENDERS

TX FRONT



TX REAR



RX FRONT



RX REAR



## Isolation of:

Video - DP/HDMI  
USB (keyboard/mouse)

FICE11PH-M

TX FRONT



TX REAR



RX FRONT



RX REAR



## Isolation of:

Video - DP/HDMI

FVCE11PH-M

## All Fiber Extender models:

- Single PC source , single output display
- Resolutions - Up to 4K-2K Ultra HD resolutions (3840 X 2160 pixels), 30Hz



Units Rear Side View



# Secure Extended Isolator Fiber Models

HSL SECURE EXTENDERS

TX FRONT



TX REAR



RX FRONT



RX REAR



## Isolation of:

Video - DP/HDMI  
USB (keyboard/mouse)

FIFE11PH-M

TX FRONT



TX REAR



RX FRONT



RX REAR



## Isolation of:

Video - DP/HDMI

FVFE11PH-M

## All Fiber Extender models:

- Single PC source , single output display
- Resolutions - Up to 4K-2K Ultra HD resolutions (3840 X 2160 pixels), 30Hz



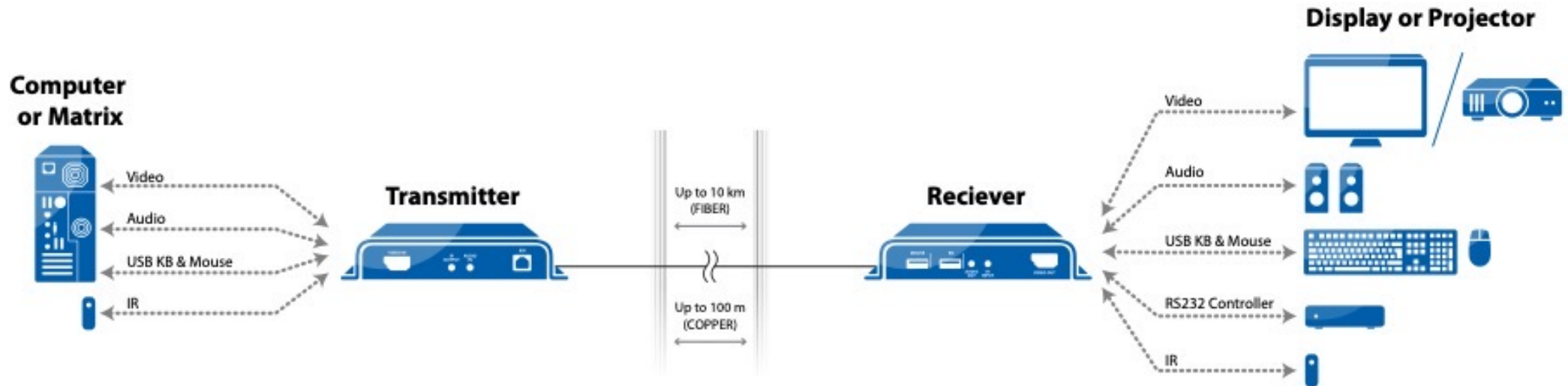
Units Rear Side View



# HSL Non Secure Extender

HSL SECURE EXTENDERS

**HSL Extenders** enable long-distance extension of computer video, audio, keyboard/mouse, and IR remote signals, using Valence high performance HDBaseT technology.



The non Secure Extender Units support:

- Analog audio
- IR remote port
- 4K, 30Hz video resolution

# Non-Secure Extender Models

HSL SECURE EXTENDERS

## Copper KVM Extender

TX FRONT



TX REAR



RX FRONT



RX REAR



**Extension:** Copper (100m)

**Interfaces:** Video - DP/HDMI, Analog Audio,  
USB, IR remote, RS-232  
PoE support

**FKCE11PH -N**

## Fiber KVM Extender

TX FRONT



TX REAR



RX FRONT



RX REAR



**Extension:** Fiber (SFP module, up to 10 km)

**Interfaces:** Video - DP/HDMI, Analog Audio  
USB, IR remote, RS-232

**FKFE11PH -N**

# Non-Secure Extender Models

HSL SECURE EXTENDERS

## Copper KVM Extender

TX FRONT



TX REAR



RX FRONT



RX REAR



**Extension:** Copper (100m)

**Interfaces:** Video - DP/HDMI,  
Analog Audio, USB, IR remote, RS-232  
PoE support

FKCE11PH60-N



# Non-Secure Extender Models

HSL SECURE EXTENDERS

## Copper USB Extender

TX FRONT



TX REAR



RX FRONT



RX REAR



**Extension:** Copper (up to 100m)

**Interfaces:** USB only

**Features:** Single PC source, single output

**FMCE10N-N**

## Copper USB Extender

TX FRONT



TX REAR



RX FRONT



RX REAR



**Extension:** Copper (up to 100m)

**Interfaces:** USB 2.0

**Features:** Single PC source, single output

**UMCE10N-N**



# Power Distribution Unit for Isolators and Extenders - PDUI

HSL SECURE EXTENDERS

Connecting multiple Isolators and Extenders to computers in a rack.

Saves space and power outlets on a network cabinet by using an external central redundant Power Distribution Unit for Isolators (PDUI):

- Only one connection to an external power source, eliminating the need for a separate supply outlet for each adaptor
- A 10 outlets hub with built-in transformer capability – eliminates the need for a separate power adaptor for each Isolator

Optional models:

- 10 outlets, 12V hub
- 10 outlets, 48V hub – specially for PoE copper extenders.
- 1U Size



# Accessories - Rack Mount Kit

HSL SECURE EXTENDERS

Enables mounting up to 10 FV11X/FI11X Extenders in a 19" 4U rack space.



1U



# HSL Isolators and Extenders Models Summary

HSL SECURE EXTENDERS

| Model                                       | Description  |
|---|--|
| <b>Secure Extender Isolators</b>            |  |
| FICE11PH-M                                  | DP/HDMI Secure Copper Extended KVM Isolator up to 100 meters 4K 30hz       |
| FVCE11PH-M                                  | DP/HDMI Secure Copper Extended Video Isolator up to 100 meters 4K 30hz     |
| FICE11CH-M                                  | USB C to HDMI Secure Copper extended KVM isolator up to 100 meters 4K 30hz |
| FIFE11PH-M                                  | DP/HDMI Secure Fiber Extended KVM Isolator up to 10KM 4K 30hz              |
| FVFE11PH-M                                  | DP/HDMI Secure Fiber Extended Video Isolator up to 10KM 4K 30hz            |
| <b>Non-Secure Extenders (Arriving Soon)</b> |  |
| FKCE11PH-N                                  | DP/HDMI Copper Extender KVM up to 100 meters 4K 30hz                       |
| FKFE11PH-N                                  | DP/HDMI Fiber Extender KVM up to 10KM 4K 30Hz                              |
| FKCE11PH60-N                                | DP/HDMI Copper Extender KVM up to 100 meters 4K 60hz                       |
| FMCE10N-N                                   | USB Copper Extender KM up to 100 meters                                    |
| UMCE10N-N                                   | USB 2.0 Copper Extender up to 100 meters                                   |
| <b>Accessories</b>                          |  |
| PDUI10                                      | 10 Port 12v DC Junction box  |
| RK-4U-HKS-10                                | Rack Mount KIT 4U  |
| RK-1U6-FI11X-M                              | 6 Isolators Metal Chassis Tray Packing Kit                                 |



