

RALOY

CATx / Fiber KVM Extender Series

Access | Integrate | Consolidate



KVM Extender Series

Raloy KVM extension technology bridges the physical gap between users and their computing hardware through point-to-point signal delivery. Utilizing standard CATx cabling, signals can travel up to 200 meters, while fiber optics enable significantly longer distances of up to 20 kilometers. This allows complete control over remote systems from a single desktop console comprising a keyboard, monitor, and mouse. It is the ideal solution for eliminating desktop noise and heat by relocating equipment, or for providing secure access to machines housed in isolated environments.

CATx KVM Extender



RKE-CATxVGA

- ▶ VGA CATx KVM Extender

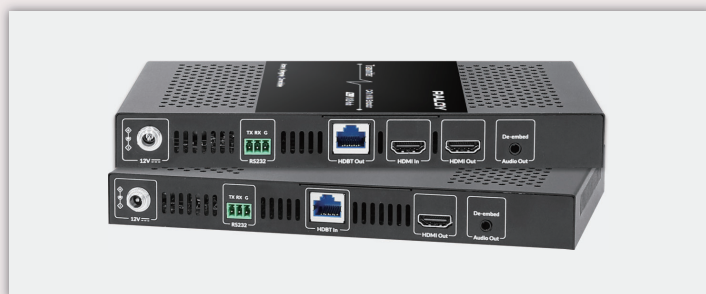
RKE-CATxHDMI

- ▶ HDMI CATx KVM Extender

RKE-CATx4KHDMI

- ▶ 4K HDMI CATx KVM Extender

CATx KVM Extender PLUS USB hub



RKHE-CATxVGA

- ▶ VGA CATx KVM Extender + USB-hub

RKHE-CATx4KHDMI

- ▶ HDMI CATx KVM Extender + USB-hub

RKHE-CATx4KDP

- ▶ DisplayPort CATx KVM Extender + USB-hub

Fiber KVM Extender



RKHE-FXVGA

- ▶ VGA Fiber KVM Extender + USB-hub

RKE-FX4KHDMI

- ▶ HDMI Fiber KVM Extender

RKE-FX4KDP

- ▶ DisplayPort Fiber KVM Extender

Applications



Industrial Automation & Manufacturing



Operating Rooms



Government & Public Sector



Medical Imaging



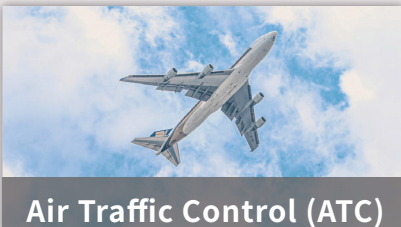
Telecommunication Offices



Conference Centers



Education



Air Traffic Control (ATC)



Enterprise & Commercial



Small Office Home Office (SOHO)



Digital Signage & Kiosks



Broadcast & Post-Production

CATx KVM Extender

Raloy CATx KVM extender series offers distinct models supporting DisplayPort, HDMI, or VGA interfaces. Users can select the appropriate model based on specific resolution requirements, ranging from standard 4:3 resolutions, FHD (1920 x 1080p), WUXGA (1920 x 1200), 2K (2560 x 1080), up to 4K 60Hz (3840 x 2160).

VGA



RKE-CATxVGA VGA CATx KVM Extender

- Superior video quality and built-in ESD protection
- Extends VGA & USB KB/MS signals point-to-point by 500 ft (150 m)
- Supports video resolutions up to 1920 x 1200 (WUXGA)
- Auto video adjustment according to the length of CAT. 5e/6/7 cable

HDMI



RKE-CATxHDMI HDMI CATx KVM Extender

- Zero latency with near-lossless video compression
- Extend HDMI & USB KB/MS signals point-to-point by 650 ft (200 m)
- Supports video resolutions up to 1920 x 1200 (WUXGA)
- Gigabit Ethernet Transmission via CAT. 5e/6/7 cable

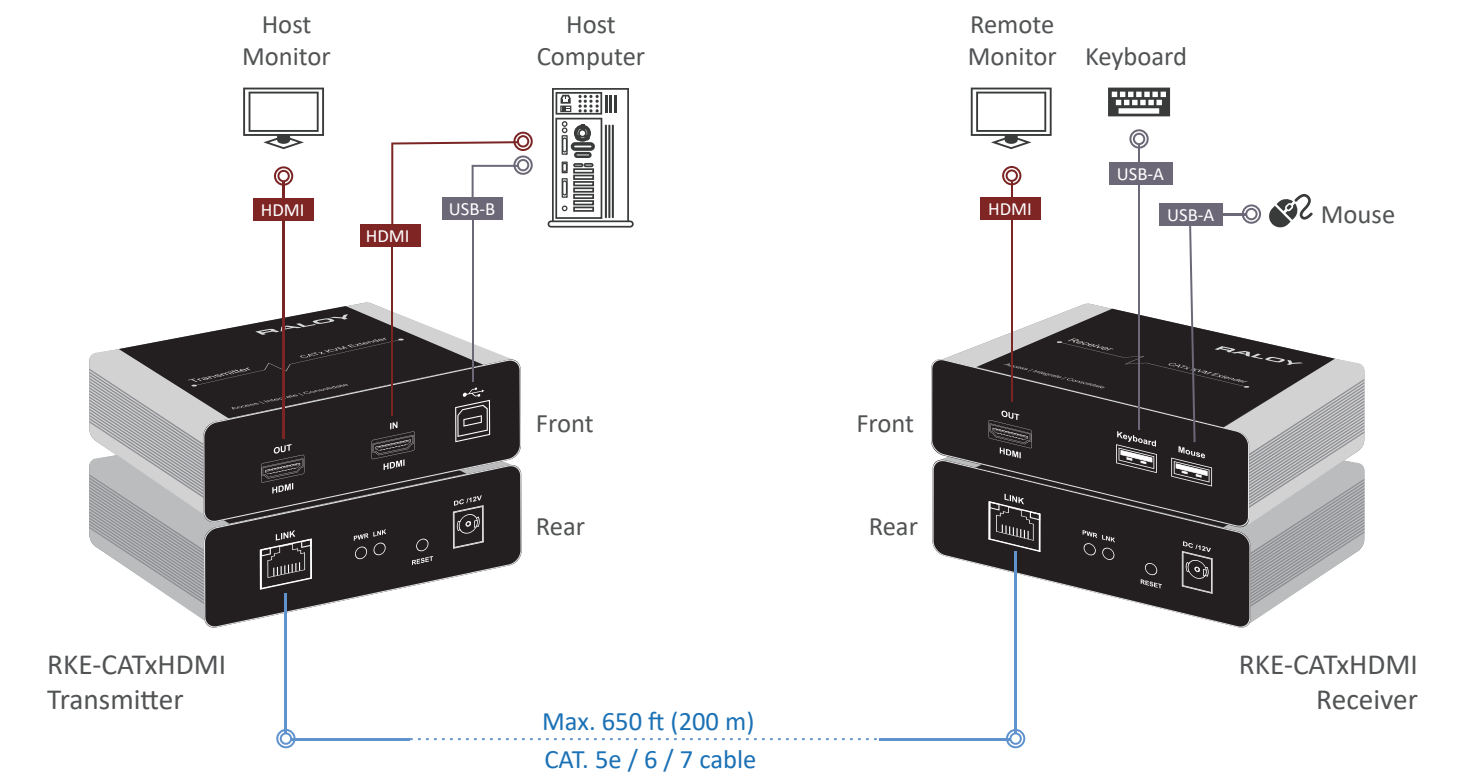
4K HDMI



RKE-CATx4KHDMI 4K HDMI CATx KVM Extender

- Zero latency with near-lossless video compression
- Extend HDMI & USB KB/MS signals point-to-point by 230 ft (70 m)
- Supports video resolutions up to 4K 60Hz 3840 x 2160@60Hz
- Long Distance 4K Solution via CAT. 6/7 cable

Connection Diagram of CATx KVM Extender



Specification of CATx KVM Extender

Extender Model		RKE-CATxVGA	RKE-CATxHDMI	RKE-CATx4KHDMI
Max Resolution		FHD 1920 x 1080@60Hz WUXGA 1920 x 1200@60Hz		4K 3840 x 2160@60Hz
Max. Distance	CAT. 6 / 7 CAT. 5e	420 ft (130 m)	650 ft (200 m)	230 ft (70 m) Not support
Link Port	Transmitter Receiver	RJ-45		
Video Port	Transmitter Receiver	VGA	HDMI	HDMI
Compliant	Video HDCP	- -	HDMI 1.2 -	HDMI 2.0 HDCP 2.2
Loop-out Port	Transmitter	VGA	HDMI	HDMI
USB Port	Transmitter Receiver	1 x USB-B for host computer 2 x USB-A for keyboard & mouse		1 x USB-A for host computer
Audio Port	Transmitter Receiver	Nil		S / PDIF Audio Output
Dimension (W x D x H)	Transmitter Receiver	4.33 x 3.94 x 1.38 inch (110 x 100 x 35 mm)		5.91 x 4.21 x 1.12 inch (150 x 107 x 28.4 mm)

CATx KVM Extender **PLUS** USB hub

The series of Raloy CATx KVM extender + USB-hub provides versatile connectivity with models specifically designed for DisplayPort, HDMI, or VGA interfaces. These units support a broad spectrum of resolutions to match specific user requirements, spanning from standard 4:3 formats, FHD 1080p, up to higher resolutions like WUXGA and 4K 60Hz. Additionally, integrated USB hub functionality enables efficient sharing of peripheral devices.

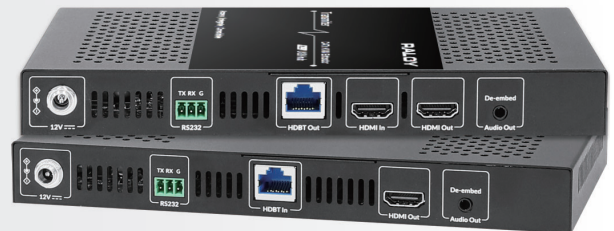
VGA



RKHE-CATxVGA CATx VGA KVM Extender + USB-hub

- Superior video quality and near-lossless video compression
- Extend VGA / Audio / USB 2.0 / RS-232 point-to-point by 393 ft (120 m)
- Supports video resolutions up to 2560 x 1080@60Hz
- Gigabit Ethernet Transmission via CAT. 5e / 6 / 7 cable
- 4 x USB 2.0 hub port for peripheral devices
- Support IR remote control

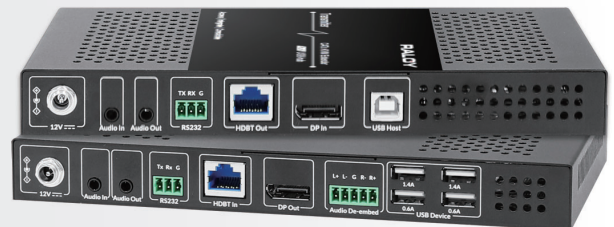
4K HDMI



RKHE-CATx4KHDMI CATx HDMI KVM Extender + USB-hub

- HDBaseT 3.0 extend uncompressed video & audio up to 18Gbps
- Extend HDMI / Audio / USB 2.0 / RS-232 point-to-point by 330 ft (100 m)
- Supports video resolutions up to 3840 x 2160@60Hz
- Gigabit Ethernet Transmission via CAT. 5e / 6 / 6A cable
- 4 x USB 2.0 hub port for peripheral devices

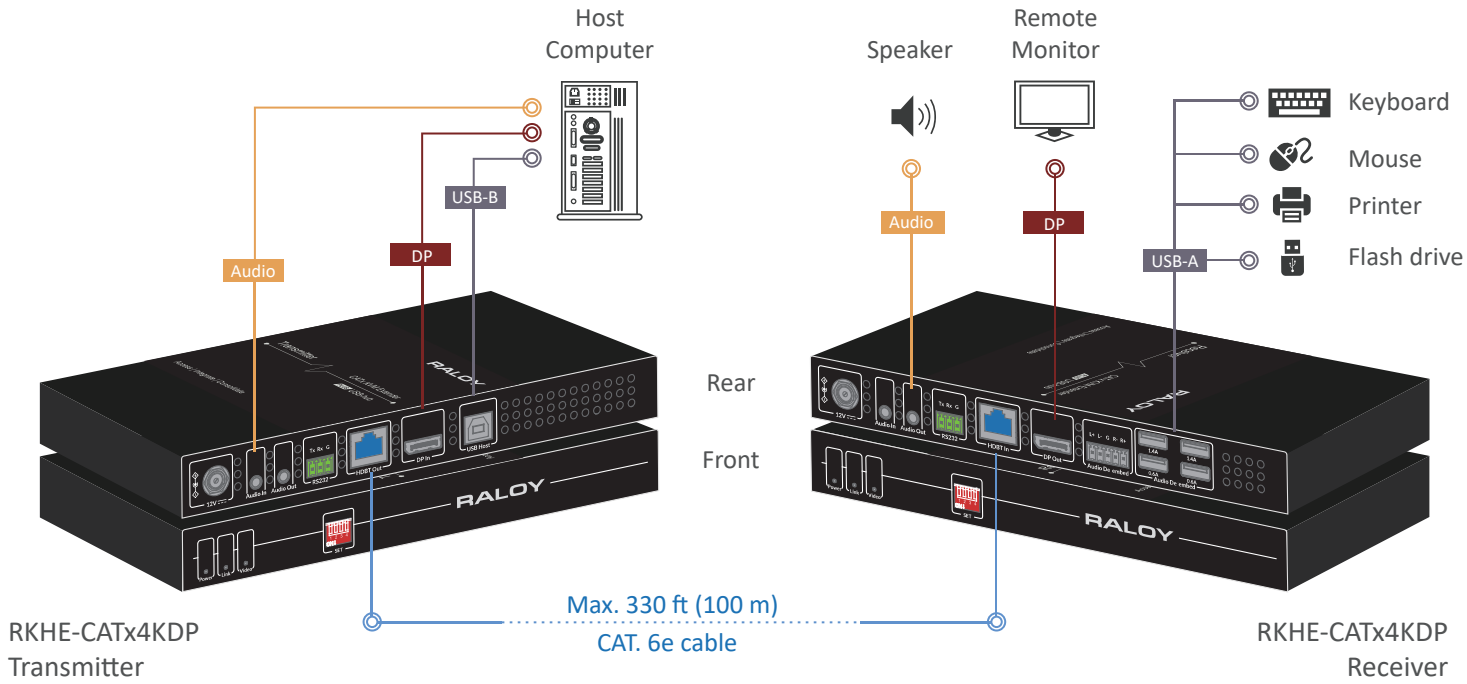
4K DP



RKHE-CATx4KDP CATx DisplayPort KVM Extender + USB-hub

- HDBaseT 3.0 extend uncompressed video & audio up to 18Gbps
- Extend DisplayPort / Audio / USB 2.0 / RS-232 point-to-point up to 330 ft (100 m)
- Supports video resolutions up to 3840 x 2160@60Hz
- Gigabit Ethernet Transmission via CAT. 5e / 6 / 6A cable
- 4 x USB 2.0 hub port for peripheral devices

Connection Diagram of CATx KVM Extender **PLUS** USB-hub



Specification of CATx KVM Extender **PLUS** USB-hub

Extender Model		RKHE-CATxVGA	RKHE-CATx4KHDMI	RKHE-CATx4KDP
Max Resolution		2560 x 1080@60Hz	4K 3840 x 2160@60Hz	
Max. Distance	CAT. 6A	393 ft (100 m)	330 ft (100 m)	
	CAT. 5e / 6		230 ft (70 m)	
Link Port	Transmitter Receiver	RJ-45		
Video Port	Transmitter Receiver	VGA	HDMI	DisplayPort
Compliant	Video	-	HDMI 2.0	DP 1.2a
	HDCP	-	HDCP 2.2	
Loop-out Port	Transmitter	Nil	HDMI	Nil
USB Port	Transmitter Receiver	4 x USB-A 2.0 for KB / MS / Peripheral		
Audio Port	Transmitter Receiver	3.5mm jack		
Serial Port	Transmitter Receiver	RS-232	RS-232 (with DIP switch for setting)	
IR Port	Transmitter Receiver	3.5mm jack	Nil	
Dimension (W x D x H)	Transmitter Receiver	5.16 x 3.66 x 1.26 inch (131 x 93 x 32 mm)	8.46 x 4.72 x 0.98 inch (215 x 120 x 25 mm)	

Fiber KVM Extender

The Raloy Fiber KVM extender series leverages optical fiber technology to transmit essential signals—video, audio, RS-232 serial, and USB—over vast distances up to 20km. These extenders ensure pristine signal integrity, delivering instantaneous, zero-latency performance with complete immunity to environmental interference. The series offers distinct models supporting DisplayPort, HDMI, or VGA interfaces to match specific visual requirements, ranging from FHD up to uncompressed 4K60. Furthermore, integrated USB hub functionality allows for seamless peripheral management at the remote location.

VGA



RKHE-FXVGA VGA Fiber KVM Extender + USB-hub

- Superior video quality and near-lossless video compression
- Extend VGA / USB 2.0 / Audio / RS-232 point-to-point, up to 12.5 miles (20 km)
- Supports video resolutions up to 2560 x 1080@60Hz
- Single-mode/ Multi-mode fiber transmission
- 4 x USB 2.0 hub port for peripheral devices
- Support IR remote control

4K HDMI



RKE-FX4KHDMI HDMI Fiber KVM Extender

- Zero delay & extend uncompressed video & audio up to 10Gbps
- Extend HDMI 2.0/ Audio/ RS-232 signal point-to-point, up to 6.2 miles (10 km)
- Supports video resolutions up to 3840 x 2160@60Hz
- Support Single / Multi-mode fiber transmission

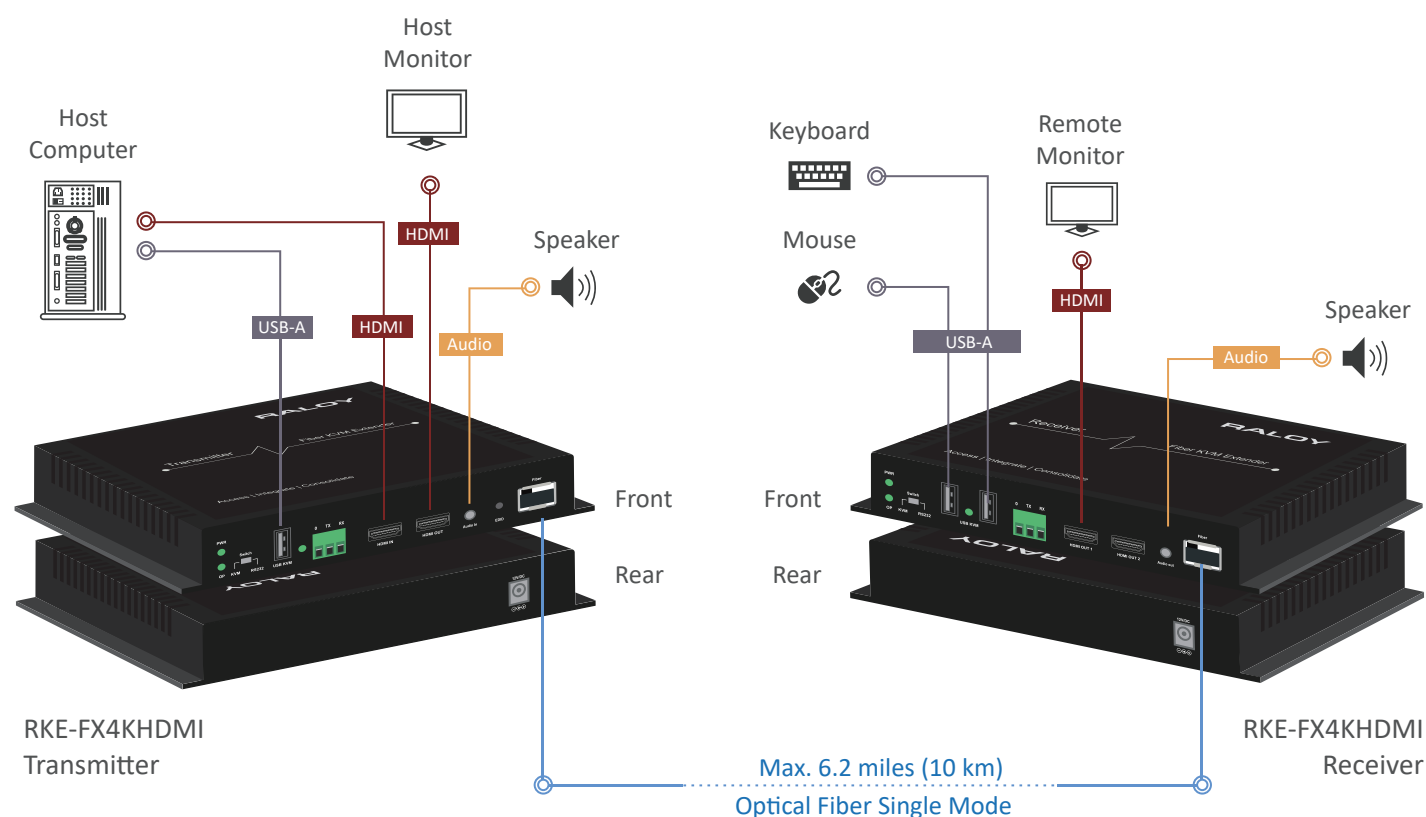
4K DP



RKE-FX4KDP DisplayPort Fiber KVM Extender

- Zero latency with near-lossless video compression
- Extend DisplayPort/ Audio/ USB signal point-to-point, up to 6.2 miles (10 km)
- Supports video resolutions up to 3840 x 2160@60Hz
- Single / Multi-mode fiber transmission

Connection Diagram of Fiber KVM Extender



Specification of Fiber KVM Extender

Extender Model		RKHE-FXVGA	RKE-FX4KHDMI	RKE-FX4KDP
Max Resolution		2560 x 1080@60Hz	3840 x 2160@60Hz	
Max. Distance via fiber	Single-mode	20 km	10 km	10 km
	Multi-mode	300 m	300 m	2 km
Link Port	Transmitter	LC		
	Receiver			
Video Port	Transmitter	VGA	HDMI	DisplayPort
	Receiver			
Compliant	Video	-	HDMI 2.0	DP 1.2
	HDCP	-	HDMI 2.2	HDCP 1.3
Loop-out Port	Transmitter	Nil	HDMI	Nil
USB Port	Transmitter	1 x USB-B	1 x USB-A	1 x USB-B
	Receiver	4 x USB-A 2.0 for KB / MS / Peripheral	2 x USB-A for KB / MS	2 x USB-A for KB / MS
Audio Port	Transmitter	3.5mm jack		
	Receiver			
Serial Port	Transmitter	RS-232		Nil
	Receiver			
IR Port	Transmitter	3.5mm jack	Nil	3.5mm jack
	Receiver			
Dimension (W x D x H)	Transmitter	5.16 x 3.66 x 1.26 inch (131 x 93 x 32 mm)	7.09 x 5.12 x 0.98 inch (180 x 130 x 25 mm)	7.09 x 5.91 x 1.10 inch (180 x 150 x 28 mm)
	Receiver			



Raloy provides the next generation of technology, driven to meet and exceed the flexibility, innovation, value, and quality expectations of IT professionals.

We are committed to meeting AND exceeding your expectations through quality, value, and innovation. Find the best fit for your environment in our high stability, low-failure-rate range of Rack Console Drawers, KVM Switches & KVM Extenders. Transform any rack environment with the ease of Plug-&Play connectivity and quick field installation using the included KVM cables or dongles. Experience our commitment to continuous improvement and expertise as our team accommodates the growing needs of clients.

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 www.raloy.com

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