



Freely scalable

Supports DP 1.3 sources

Up to 16 sources - Multiviewing

Up- & downscaling

Supports multiple layouts

Mix & Match with all kvm-tec series

Dense mounting capability

Fanless operation

Scalableline 4K - is a Displayport 1.2 extender remote or local over IP in fiber covering a range of up to 300 m at a resolution of 4096 x 2160 @ 60 Hz (5K 5120 x 1440) with a perfect color coding with 4:4:4 @ 8 bit per color. Scalableline provides KVM extension in realtime over IP networks, while combining it with multiviewing out of the box.

A typical Scalableline setup consists of a network of multiple Scalableline transmitters, at least a single Scalableline console and a Switching Manager. The Scalableline console can handle up to 16 KVM streams at once and display them on an up to 4K/5K display either in native resolution or scaled down to fit into user-defined layouts. Overall system-generated extension and multiviewing latency is less than 1 ms.

Switching & KVM Management

Management via OSD or with the included Switching Manager software. The intelligent software allows a comfortable management and intuitive operation of the KVM extenders in the switching system. A Windows PC, VM or tablet with network

interface in the network is required for the commissioning and operation. Switching up to 2000 endpoints. Compatible with standard 10 Gbit network switches (Layer 3).

Multi-Display work areas

Scalableline consoles can be grouped together in a Mouse Glide & Switch configuration, to provide single keyboard and mouse control for up to 4 (Scalableline)/ 16 (Scalableline PRO) consoles. Simply moving the mouse pointer over the edge of an individual KVM stream will seamlessly switch over K/M control to the other KVM stream. Within each layout, operators can select their source according to their access rights.

Compatibility and Scalability

The IP based transmission protocol allows expanding the system quite easily by providing additional network infrastructure and bandwidth. Scalableline is also compatible with Media4Kconnect and standard

Flexline components while scaling these sources is not possible or with limitations only.

Audio and Multiviewing

Scalableline provides analog and digital audio transmission options. Both stereo audio signals can be configured to either remain tied to a specific source (fixed audio) or follow the K/M controlled source (focused audio). Scalableline PRO consoles also allow for combined audio with level control (digital audio only), providing acoustic alarms of all actively displayed sources within a layout.

Cropping

Select and scale parts of Images/streams.

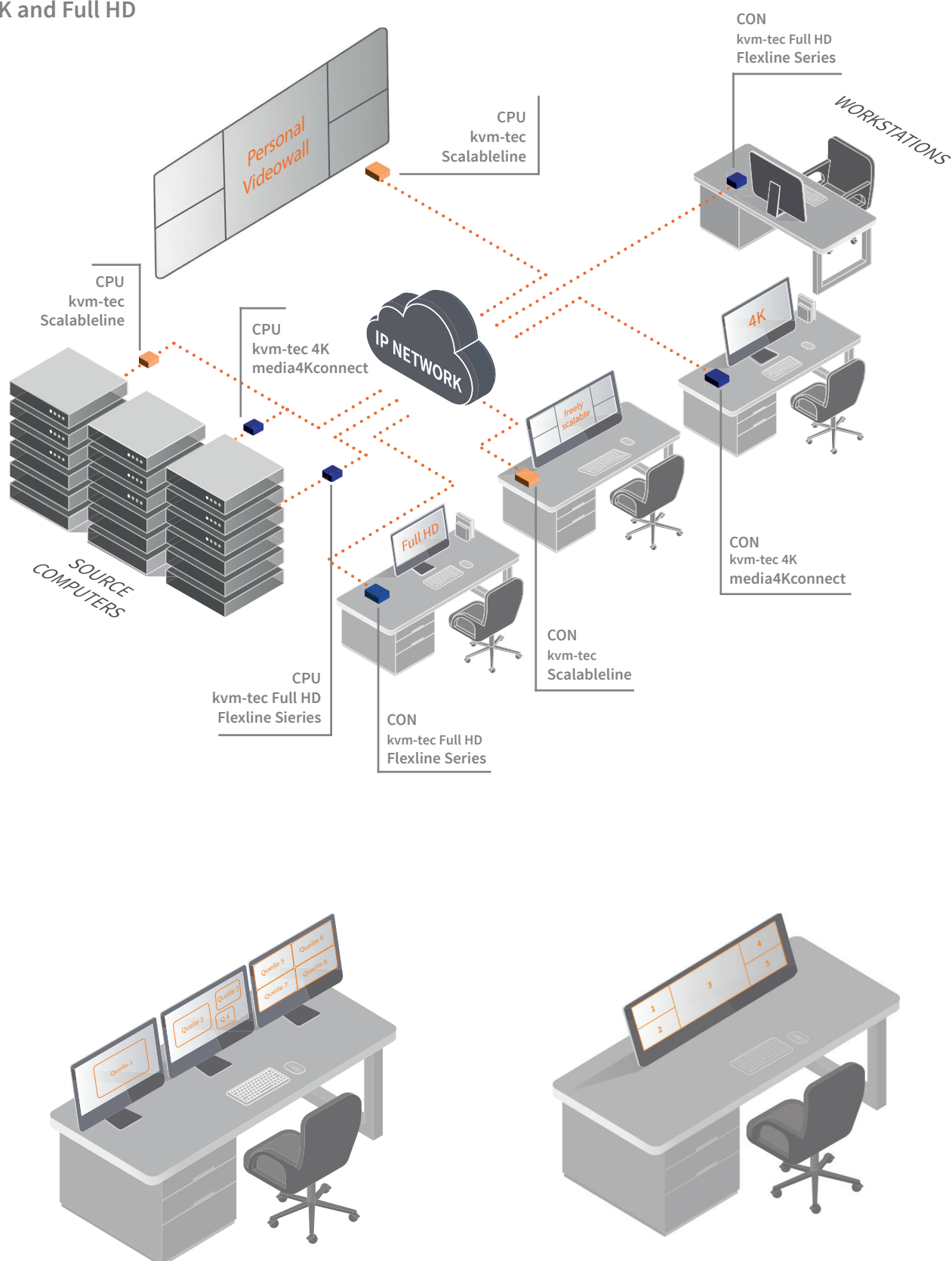
PIP

Picture in Picture display and overlapping windows.

PRODUCT FEATURES

- Resolution up to 4096 x 2160 @ 60 Hz / Ultra-Widescreen 5120 x 1440 @ 60 Hz
- 10 Gbit max. bandwidth per link
- Combines extension and multiviewing seamlessly
- Scales easily in terms of application size

FUNCTIONAL DIAGRAM

KVM Matrix Mixed Operation
of 4K and Full HD

Part-No.	Scalableline 4K	Scalableline 4K PRO
Local/CPU	 KT-6990L	 KT-6991L
Remote/CON	 KT-6990R	 KT-6991R
Accessories	10 G CATx 80 m SFP+ 10 G Fiber MM 300 m SFP+ 10 G Fiber SM 10 km SFP+ Spare PSU 19"-Rackmount up to 4x SCL 4K 19"-Rackmount + PSU 19"-Rackmount + PSU red.	KT-7016 KT-7013 KT-7017 KT-7030EU/AU/GB/US KT-6237 KT-6238 KT-6239

LOCAL (CON)	Scalableline 4K	Scalableline 4K PRO
Video Scaling Primary Link	YES	YES
Video Scaling Secondary Link	NO	YES ¹
Scaler Count	1	2 ¹
Simultaneous Downscaling	YES	NO ²
Max. Resolution Primary Link	3840 x 2160 @ 60 Hz	3840 x 2160 @ 60 Hz
Max. Resolution Secondary Link	1920x1080 @ 60Hz (downscaled)	3840x2160 @ 60 (native)
Video Sharing Primary Link	NO ¹	NO ¹
Video Sharing Secondary Link	YES ⁵	YES ⁵
Video	1 x DP1.2	1 x DP1.2
Link	2 x Fiber optical SFP+ Fiber MM 10 G 300 m	2 x Fiber optical SFP+ Fiber MM 10 G 300 m
Link Redundancy	NO	NO
Audio Analog	1 x Input & 1 x Output (3.5 mm jack)	1 x Input & 1 x Output (3.5 mm jack)
Audio Embedded	DP 1.2 embedded 16 bit, 44 kHz, 2 ch	DP 1.2 embedded 16 bit, 44 kHz, 2 ch
RS232	1 x RJ12 connector	1 x RJ12 connector
Workplace Redundancy	YES	YES
Matrix Switching	YES ³	YES ³
Point-to-Point	NO	NO
USB HID	1 x USB Type-B	1 x USB Type-B
Power	2 x 12 V / 3 A DC 5.5 x 2.1 mm connector	2 x 12 V / 3 A DC 5.5 x 2.1 mm connector
Power Redundancy	YES	YES

REMOTE (CPU)	Scalableline 4K	Scalableline 4K PRO
Max Sources / Rx Unit	16	16
Supported Monitor Resolution	Up to 5K (5120 x 1440)	Up to 5K (5120 x 1440)
Upscaling 4K sources	NO	YES
Upscaling FHD sources	NO	YES
Tx Multihead-Support	YES	YES
Scenarios	Up to 8 custom scenarios	Up to 8 custom scenarios
Mouse Glide & Switch	Up to 4 Rx units per configuration	Up to 16 Rx units per configuration
Picture-in-Picture	YES	YES
Cropping	YES	YES
Video	1 x DP 1.3	1 x DP 1.3
Audio Mode Focus	YES	YES
Audio Mode Fixed	YES	YES
Audio Mode Conference (only for Audio embedded)	NO	YES
Audio Analog	1 x Input & 1 x Output (3.5 mm jack)	1 x Input & 1 x Output (3.5 mm jack)
Audio Embedded	1 x DP 1.2 embedded 16 bit, 44 kHz, 2 ch	1 x DP 1.2 embedded 16 bit, 44 kHz, 2 ch
Videowall function*	NO	YES
Matrix Switching	YES ³	YES ³
Point-to-Point	NO	NO
USB HID	4 x USB Type-A (USB HID only)	4 x USB Type-A (USB HID only)
Link	2 x Fiber optical SFP+ Fiber MM 10 G 300 m	2 x Fiber optical SFP+ Fiber MM 10 G 300 m
Link Redundancy	YES	YES
RS232	1 x RJ12 connector	1 x RJ12 connector
Power	2 x 12 V / 3 A DC 5.5 x 2.1 mm connector	2 x 12 V / 3 A DC 5.5 x 2.1 mm connector
Power Redundancy	YES	YES