



FULL HD - KVM EXTENDER OVER IP

Tune in the easy KVM World

KVM Extender over IP in dual DVI, DVI-D,
KVM Extender USB in CAT x

smartEASY dual is a highly optimized KVM Extender over IP for distances up to 150m/492ft at a resolution of 1920x1200@60Hz and is available in copper. smartEASY KVM extenders convince with an ultra flat housing - 4 dual units in 1RU (8 video streams), have embedded sound and are compatible with standard Network components. Video sharing, USB sharing, multihead.

... smartEASY DUAL Copper/ CATx

- DVI-D/ USB2.0 KVM Extender over IP
- dual in copper/CATx
- max resolution
1920 x 1200 @60 Hz
- max distance 150m/492ft
- 4 dual smartEASY KVM Extender in 1 RU
- Sound embedded
- Full HD Videos in real time
- USB transmission time max 480Mbit/s
- only one cable for USB & Video
- DVI extension without loss of quality
- feature - freeze last image
- Local/CPU -Remote/CON Monitor Output
- for point to point or Matrix Switching Systems with Switch (Layer 3)

USB 2.0 in house development

The in-house developed USB 2.0 implementation supports typical USB devices like touch screens, sound modules, printers and alike components. On top the support for memory devices such as thumb-drives and USB HDDs can be enabled or disabled on demand providing another layer of security. And of course keyboards and mice are supported, too.

Infrastructure

Smarteasy locals and remotes are small form factor devices. They fit easily underneath a desk and up to four units can be mounted on a 19"- shelf. Single-sided interface orientation provides easy access in setup and service. They provide two power inputs for redundant feeding. MAXflex is designed fanless and with that noiseless for silent and ergonomic work spaces.

Bandwidth reduction

EASYline allows limiting the transmission bandwidth limitation in nine fix steps. This allows to managed network utilization by reducing operational performance. Depending on the use case, this might not even have a recognizable impact (e.g. static image monitoring).





All in one go

Matrix Switching Systems up to
56 endpoints without Usersystem



With **Frontbridging** 2 Local EASYline Extenders can be bridged to 1 remote dual Extender (2 network sockets) & thus one or two screens can display the contents of the PCs simultaneously with different images and can be operated either right or left.

2 local single Unit + 1 remote dual Unit = Bridging on 1 or 2 Screens



With **Backbridging** from one dual local extender can be shared to two single remote extenders. For all applications that require monitoring at different locations
1 dual local Unit + 2 remote Units = Bridging oder Sharing auf 1 oder 2 Monitore



Easy Cross Move in Bridging Mode - Softwarefeature

both PCs can be operated with one mouse and one keyboard

2 local Units + 1 remote Unit = Easy Cross Move with 1 keyboard & 1 mouse

In USB transparent the PC can be changed with a shortcut.

In Emulation Mode uninterrupted switching between the PCs with the mouse.

Latency (encoding/decoding)
<1,38 ms

For each meter of transmission additional 5ns of signal propagation need to be added. 200km result in 1ms accordingly. Latencies caused by network switch topologies vary by type and manufacturer and overall configuration and need to be counted on top!

9-Step bandwidth fix reduction (1: no – 9: max reduction)

Image Change (Frame to Frame) (%)	average bandwidth [Mbit/s] with fix reduction
5	50
10	100
25	250
50	470
75	950
100	950

With bandwidth reduction the frame rate is reduced.

Via level 5, the color accuracy is additionally the color accuracy is slightly reduced

Technical Specifications

		SE2 Local/CPU	SE2 Remote/CON
Interfaces	Video	2 x DVI-D	2 x DVI-D out
	USB 2.0	1 x USB-B to PC	4 x USB-A (devices)
Audio	Type Bandwith	embedded 16bit, 44kHz, 2 ch	embedded 16bit, 44kHz, 2 ch
Video	Signal type: resolution (digital): Color mode: Resolution (analog opt) color mode	DVI-D max. 1920x1200 @ 60Hz DVI-I max 1920 x 1200 @60 Hz 24 bit	DVI-D max. 1920x1200 @ 60Hz
USB	Specification: Type: Rate:	USB 2.0 transparent max. 480 Mbit/s mass storage & camera optional	USB 2.0 transparent max. 480 Mbit/s mass storage & camera optional
Netwek - interface		RJ45	RJ45
Case & weight	Material Dimension (w x H x D) Weight Shipping weight SET 1895 g /4.17 lb	anodized aluminum 108 x 43 x 107,5 mm 4.25 x 1.69 x 4,23 inch 295 g / 0.65 lb shipment weight 1005g/2,21 lb	anodized aluminum 108 x 43 x 107,5 mm 4.25 x 1.69 x 4.29 inch 295 g/ 0.65 lb shipment weight 890 g/ 1.96lb
Power supply	Type	external power supply 12 VDC 1A max 35 V barrel connector 2.1mm	external power supply 12 VDC 1A max 35 V barrel connector 2.1mm
Power input	Operation	6W	6W without USB devices Example: a typical keyboard has a power consumption of 0.2 W
Compression Factor		3.5 depending on image content	3.5 depending on image content
Operation environment	Temperature Humidity	0 to +45 °C /32 to 113 °F < 80%, non- condensing	0 to +45 °C /32 to 113 °F < 80%, non condensing
Storage environment	Temperature Humidity	-25 to 80 °C /-13 to 176 °F < 80%, non condensing	-25 to 80 °C -13 to 176 °F < 80%, non condensing
Cooling		free air convection	free air convection
MTBF		82.820 calculated hours approx 10 years	82.820 calculated hours approx 10 years
Conformity		CE, FCC	CE, FCC
Warranty		2 years (flexible warranty extension optional)	2 years (flexible warranty extension optional)
Delivery content	Devices	1 x SE2 local (CPU)	1 x SE2 remote (CON)
	Power supply	1 x wall power supply 12V 1A EU-plug or INT Plug	1 x wall power supply 12V 1A (EU-plug)
	Cables	2 x DVI - DVII cable 1,8m/5,9ft 1 x USB cable 1,8m/ 5,9 ft	
	Mounting	4 x rubber feet	4 x rubber feet
	Manual	Quickinstallation manual download: www.kvm-tec.com	



Upgrades opt
• USB Memory

Part Number & Short description

Part.Nr	Kurzbezeichnung	Short Description
KT - 8121	SE2-SET	smartEASY Extender Dual – Set EAN 0798190109916 UPC 51497113698
KT - 8121L	SE2L	smartEASY Extender Dual –Local Unit /CPU EAN 0798190109923 UPC 51497113704
KT - 8121R	SE2R	smartEASY Extender Dual –Remote Unit /CON EAN 0798190109930 UPC51497113711
KT - 8147	SE-MO	smartEASY Memory Upgrade EAN 0798190112190 UPC 51497115555
KT - 9003 KT - 9002	GV5JU GV5J	Warranty extension to 5 years per UINIT Warranty extension to 5 years per SET
ADD-ONS KT - 6231	UMK-EASY	Rack Mounting Kit for under the table for EASYline EAN 0798190109466 UPC 051497113247
KT - 6232	RMK-EASY-F	Rack Mounting Kit with front panel for EASYline EAN 0798190109473 UPC 051497113254
6KT - 233	RMK-EASY-FN	Rack Mounting Kit with front panel and Power supply EAN 0798190109480 UPC 051497113261
KT - 6234	RMK-EASY	Rack Mounting Kit with front panel and redundant Power supply for EASYline EAN 0798190109503 UPC 051497113285
KT - 6235 KT - 6236 KT-7070 KT-7080	DINMK-EASY VH -EASY TNT40 TNT199	Din Rail Mounting for EASYline EAN 0798190109510 UPC 051497113292 Vesa Mounting Kit for EASYline EAN 0798190109527 UPC 051497113308 Din Rail power supply DN40-12 Din Rail power supply DN-100-12



point to point



switching system

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