

FLEXLINE

smart flex

Dual / CAT FULL HD
KVM-TECEXTENDER OVER IP



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

Smartflex 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. Smartflex extenders convince by an ultra flat housing - 4 dual units in 1 U (8 video streams), have embedded sound and are compatible with standard network components. network components. Video sharing, USB sharing, multihead.

... Smartflex dual copper/ CATx

- DVI-D/ USB2.0 Extender over IP
- dual in copper/CATx
- max resolution
1920 x 1200 @60 Hz
- max Distance 150m/492ft
- 4 dual SmartflexKVM Extender in 1RU
- Sound embedded
- Full HD Videos in real time
- USB transfer rate max 480Mbit/s
- only one cable for USB & Video
- DVI extension without quality loss
- Feature - freeze last image
- Local/CPU -Remote/CON Monitor Output
- point to point - matrix switching system with switch (Layer3)
- PoE version opt (PoE capable network switch)
- Switching Manager basic version included

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

Smartflex 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. Smartflex is designed fanless and with that noiseless for silent and ergonomic work spaces.

Bandwidth reduction

Smartflex 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).



www.kvm-development.com

Full HD
over IP



smart

flex

Part No.: 6021



Upgrades opt
USB Memory
Interlaced Mode

Matrix Switching System

Combining multiple Smartflex fiber extender locals and remotes together via a L3 network switch requires a central Switching Manager creating a multi-point matrix switching system with access control and other administrative and operational functionality.

Compatibility

Smartflex extenders are compatible to ECOsmart and all Flexline extenders. In matrix setups they can be combined with media4Kconnect and Scalableline extenders lining up to a homogeneous system managed by Switching Manager.

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 r eduction
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

www.kvm-development.com



smart

Part No.: 6021

flex

Technical Spezifications

		SV2 Local/CPU	SV2 Remote/CON
Interfaces	Video USB 2.0 Audio	2 x DVI-D 1 x USB-B to PC	2 x DVI-D out 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:	DVI-D max. 1920x1200 @ 60Hz 24bit	DVI-D max. 1920x1200 @ 60Hz 24bit
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
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
Network Interface		RJ45	RJ45
Compression Factor		3.5 depneding on image content	3.5 depending on image content
Power supply	Type	external power supply 12 VDC 1A max 35 V	external power supply 12 VDC 1A max 35 V
Power input	Operation	6W	6W without USB devices Example: a typical keyboard has a power consumption of 0.2W
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 (5 years optional)	2 years (5 years optional)
Delivery content	Devices Power supply Cables Mounting Manual	1 x SVf2 local (CPU) 1 x wall power supply 12V 1A EU-plug or INT Plug 2 x DVI - DVII cable 1,8m/5,9ft 1 x USB cable 1,8m/ 5,9 ft 4 x rubber feet Quickinstallation manual download: www.kvm-tec.com	1 x SV2 remote (CON) 1 x wall power supply 12V 1A (EU-plug) 4 x rubber feet



smart

flex

Part No.: 6021

Part No.	Short Name	Short description
6021	SV2	Smartflex Extender Dual – Set EAN 0798190109077 UPC 051497112851
6021L	SV2L	Smartflex Extender Dual –Local Unit /CPU EAN 0798190109084 UPC 051497112868
6021R	SV2R	Smartflex Extender Dual –Remote Unit /CON EAN 0798190109091 UPC 051497112875
6043	SV-MO	SMARTflex memory upgrade EAN 0798190109497 UPC 051497113278
6034	POE-Unit	FLEXline PoE Version Unit EAN 0798190109633 UPC 051497113414
9003	GV5JU	Warranty extension to 5 years per UINIT
ADD-ONS		
6231	UMK-FLEX	Rack Mounting Kit for under the table for FLEXline EAN 0798190109466 UPC 051497113247
6232	RMK-FLEX-F	Rack Mounting Kit with front panel for FLEXline EAN 0798190109473 UPC 051497113254
6233	RMK-FLEX-FN	Rack Mounting Kit with front panel and Power supply EAN 0798190109480 UPC 051497113261
6234	RMK-FLEX	Rack Mounting Kit with front panel and redundant Power supply for FLEXline EAN 0798190109503 UPC 051497113285
6235	DINMK-FLEX	Din Rail Mounting for FLEXline EAN 0798190109510 UPC 051497113292
6236	VH -FLEX	Vesa Mounting Kit for Flexline EAN 0798190109527 UPC 051497113308
7070	TNT40	Din Rail Power Supply DN40-12
7080	TNT 100	DIN RAIL Power Supply DN100-12



point to point



switching system

KVM Development & Support GmbH
Steinbruchgasse 34
2500 Baden
Austria
phone:+43 2253 81912
www.kvm-development.com

www.kvm-development.com