

FLEXLINE

smart flex



SINGLE/ CAT FULL HD KVM-TEC EXTENDER OVER IP

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

Smartflex single 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 single 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 single copper/ CATx

- DVI-D/ USB2.0 Extender over IP
- single in copper/CATx
- max resolution
1920 x 1200 @60 Hz
- max Distance 150m/492ft
- 4 single 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).



smart

flex

Part No.: 6011



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



smart

Part No.: 6011

flex

Technical Spezifications

		SV1 Local/CPU	SV1 Remote/CON
Interfaces	Video	1 x DVI-D 1 x DVI-D out	1 x DVI-D out
	USB 2.0	1 x USB-B to PC	4 x USB-A (devices)
	Audio		
Audio	Type	embedded	embedded
	Bandwith	16bit, 44kHz, 2 ch	16bit, 44kHz, 2 ch 32 Ohm
Video	Signal type:	DVI-D	DVI-D
	resolution (digital): Color mode:	max. 1920x1200 @ 60Hz 24bit	max. 1920x1200 @ 60Hz 24bit
USB	Spezifikation:	USB 2.0	USB 2.0
	Type: Rate:	transparent max. 480 Mbit/s mass storage & camera optional	transparent max. 480 Mbit/s mass storage & camera optional
Case & weight	Material	anodized aluminum	anodized aluminum
	Dimension (w x H x D)	108 x 43 x 107,5 mm	108 x 43 107,5 mm
	Weight	4.25 x 1.69 x 4,23 inch	4.25 x 1.69 x 4.29 inch
	Shipping weight SET 1895 g /4.17 lb	295 g / 0.65 lb shipment weight 1005g/2,21 lb	295 g/ 0.65 lb shipment weight 890 g/ 1.96lb
Compression factor		3.5 depending fom the image content	3.5 depending from the image content
Network Interface		RJ45	RJ45
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 connector2.1mm
Power input	Operation	6W	6W without USB devices Example: a typical keyboard has a power consumption of 0.2W
Operation environment	Temperature	0 to +45 °C /32 to 113 °F	0 to +45 °C /32 to 113 °F
	Humidity	< 80%, non- condensing	< 80%, non condensing
Storage environment	Temperature	-25 to 80 °C /-13 to 176 °F	-25 to 80 °C -13 to 176 °F
	Humidity	< 80%, non condensing	< 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	1 x SV local (CPU)	1 x SV remote (CON)
	Power supply	1 x wall power supply 12V 1A EU-plug or INT Plug	1 x wall power supply12V 1A (EU-plug)
	Cables	1 x DVI - DVI 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	



smart

flex

Part No.: 6011

Part No.	Order No.	Short description
6011	SV1	Smartflex Extender Single – Set EAN 0798190109046 UPC 051497112820
6011L	SV1L	Smartflex Extender Single –Local Unit /CPU EAN 0798190109053 UPC 051497112837
6011R	SV1R	Smartflex Extender Single –Remote Unit /CON EAN 0798190109060 UPC 051497112844
6047	SV-MO	SMARTflex memory upgrade EAN 0798190109497 UPC 051497113278
6033	POE-Set	FLEXline PoE Version Set EAN 0798190109626 UPC 051497113407
6034	POE-Unit	FLEXline PoE Version Unit EAN 0798190109633 UPC 051497113414
9003	GV5JU	Warranty extension flexible 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
234	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	TNT100	Din Rail power supply DN100-12



KVM Development & Support 

www.kvm-development.com