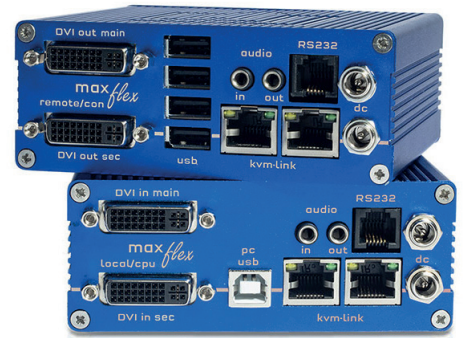


max flex

DUAL/ CAT FULL HD
KVM EXTENDER OVER IP



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

Maxflex dual is a highly optimized KVM Extender over IP for distances up to 150m at a resolution of 1920x1200@60Hz and is available in copper. Maxflex extenders feature an ultra slim chassis - 4 dual/single units in 1U (8 video streams), have embedded sound and are compatible with standard network components. Video sharing, USB sharing, multihead.

... Maxflex dual copper/CATx

- dual in copper
- max resolution
- 1920 x 1200 @60 Hz
- max distance 160km
- 4 dual Maxflex KVM extenders in 1U
- 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
- RS 232 interface

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

MAXflex 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

MAXflex 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).

Mouse glide & Switch

up to 16 can be operated with one mouse and one Keyboard



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Upgrades INCLUDED

- USB Memory
- Sound analog
- Analog VGA - as DVI transmitted

Matrix Switching System

Combining multiple MAXflex 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

MAXflex extenders are compatible to ECOsmart, SMARTflex and MASTERflex extenders. In matrix setups they can be combined with media4Kconnect and Scalableline extenders lining up to a homogeneous system managed by Switching Manager.

Audio and RS-232

The MAXflex KVM extender provides two ways of transmitting stereo audio signals. The video embedded 2-channel – L-PCM standard and unbalanced analog bi-directional audio using 3.5mm jacks for Line input and speakers. An additional RS-232 interface extends data with up to 155kBits along the link as well.

Mouse glide & Switch

In matrix applications like control rooms the MAXflex series built-in Mouse, Glide & Switch feature allows operators with multi-monitor setups connected to multiple sources single keyboard and mouse control by simply crossing the borders of a screen performing smooth background switching. Such an operator setup may consist of up to 16 monitors

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



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Technical Specifications

		MA2 Local/CPU	MA2 Remote/CON
Interfaces	Video	2 x DVI in	2x DVI-D out
	USB 2.0	1 x USB-B to PC	4 x USB-A (devices)
	Audio	1 x 3,5mm jack (Line In) 1 x 3,5mm jack (Line out)	1 x 3,5mm jack Line In) 1Vpp 1 x 3,5mm lack (Speaker) 2x10mW@320hm
Video	Signal type Resolution (digital) Signal type Resolution (analog) (opt.) Color mode	DVI-D max. 1920x1200 @ 60Hz DVI-I max. 1920x1200 @ 60Hz 24bit	DVI-D max. 1920x1200 @ 60Hz
Audio	Type Bandwidth	analogue / embedded 16bit, 44kHz, 2ch	analogue/embedded 16 bit, 44kHz, 2ch
USB	Specification Type Rate	USB 2.0 transparent max. 480 Mbit/s mass storage devices & camera optional	USB 2.0 transparent max. 480 Mbit/s mass storage devices & camera optional
Compression Factor		3,5 depending on image content	3.5 depending on image content
Network Interface		RJ45	RJ45
RS232 interface	RJ12 socket	transparent up to 115200 baud +/-5V,CTS/DTR handshake	transparent up to 115200 baud +/-5V,CTS/DTR handshake
Casing	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 43x 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	wall power supply unit 12 VDC 2A redundant max 35V	wall power suppl y unit 12 VDC 2A redudant max 35V
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	1 x MA2 local (CPU)	1 x MA2 remote (CON)
	Power Supply	1 x wall power supply unit 12V 1A (EU-plug or INT plug)	1 x wall power supply unit 12V 1A (EU-plug or INT plug)
	Cables	2 x DVI - DVI cable 1,8m (5.9ft) 1 x USB cable 1,8m (5.9ft)	
	Mounting	4 x rubber feet	4 x rubber feet
	Manual	Quickinstallation	



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Part Number & Short description

Part No.	Short Name	Short description
6024	MA2	Maxflex Extender Dual – Set EAN 0798190109282 UPC 051497113063
6024L	MA2-L	Maxflex Extender Dual – Local Unit /CPU EAN 0798190109299 UPC 051497113070
6024R	MA2-R	Maxflex Extender Dual – Remote Unit /CON EAN 0798190109305 UPC 051497113087
6034	POE-Unit	FLEXline PoE Upgrade Unit EAN 0798190109633 UPC 051497113414
9003	GV5JU	Warranty extension flexible per UNIT
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 redundand 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	TNT120	DIN Rail Power Supply DIN 100-12



point to point



switching system

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