

FLEXline

master flex



Single/ Kuper redundant FULL HD KVM EXTENDER OVER IP

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

Masterflex single redundant is a highly optimized KVM Extender over IP for distances up to 150m at a resolution of 1920x1200@60Hz and is available in copper. Masterflex 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. Video sharing, USB sharing, multihead.

... Masterflex single Copper/ CATx

- DVI-D/ USB2.0 Extender over IP , redundant
- single redundant in copper/CATx
- max resolution
- 1920 x 1200 @60 Hz
- max distance 150m
- 4 single Masterflex KVM Extender 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)

USB 2.0 in house development

The in-house developed USB 2.0 implementation supports typical USB devices such as touch screens, sound modules, printers and similar components. In addition, support for storage devices such as thumb drives and USB HDDs can be enabled or disabled as needed, adding another layer of security. And of course, keyboards and mice are also supported.

Infrastructure

Masterflex Local and Remote Units have a slim form factor. They fit easily under a desk and up to four units can be mounted in a 19" rack. The single-sided orientation of the interfaces allows for easy access during setup and maintenance. Flexline has a fanless design for quiet and ergonomic workspaces.

Bandwidth reduction

Masterflex enables transmission bandwidth to be limited in nine fixed stages. This enables controlled network utilization by reducing the operating power. Depending on the application, this can even be done without any noticeable effects (e.g. static image monitoring).



www.kvm-tec.com

V10522

Full HD
over IP



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Part No.: KT- 6012



Upgrades opt

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

Matrix Switching System

To interconnect multiple Masterflex Extender Locals and Remotes via an L3 network switch, a central switching manager is required to create a multipoint matrix switching system with access control and other administrative and operational functions.

Compatibility

Masterflex extenders are compatible with ECOsmart, all extenders of the Flexline series. In matrix setups, they can be combined with media4Kconnect and Scalableline extenders to form a homogeneous system managed by the Switching Manager.

Audio

Masterflex KVM Extender offers two options for transmitting stereo audio signals. The video embedded 2-channel - L-PCM standard and unbalanced analog bi-directional audio via 3.5mm jack sockets for line input and speakers.

Latency (encoding/decoding)
<1,38 ms

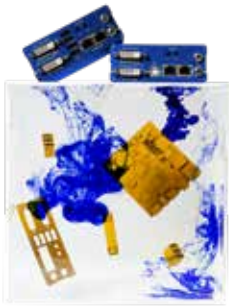
For each meter of transmission additional 5ns of signal propagation need to be added. 200km result in 1ms accordingly. Latencies caused by network switch topologies vary by type and manufacturer and overall configuration and need to be counted on top!

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

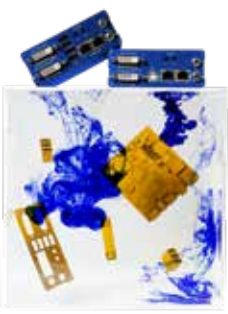


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Technical Specifications

		MV1-Local/CPU	MV1-R Remote/CON
Interfaces	Video	1 x DVI in 1x DVI out	1x 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@32Ohm
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
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
Network Interface		RJ45	RJ45
Compression factor		3,5 depending on image content	3.5 depending on image content
Power Supply	Type	wall power supply unit 12 VDC 2A redundant max 35 V	wall power supply unit 12 VDC 2A redundant 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 MV local (CPU) 1 x wall power supply unit 12V 1A (EU-plug or INT plug) 1 x DVI - DVI cable 1,8m (5.9ft) 1 x USB cable 1,8m (5.9ft) 1 x VGA-DVI cable 1,8m (5.9ft) opt 1 x Audio cable 1,8m (5.9ft) opt	1 x MVX remote (CON) 1 x wall power supply unit 12V 1A (EU-plug or INT plug)
		4 x rubber feet	4 x rubber feet
		Quickinstallation manual download: www.kvm-tec	



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Part No.: KT- 6012

Part Number & Short Description

Part No.	Short Name	Short description
KT - 6012	MV1	Masterflex Extender Single – Set EAN 0798190109107 UPC 051497112882
KT - 6012L	MV1-L	Masterflex Extender Single –Local Unit /CPU EAN 0798190109114 UPC 051497112899
KT - 6012R	MV1-R	Masterflex Extender Single –Remote Unit /CON EAN 0798190109121 UPC 051497112905
KT - 6041	MV-SO	MASTERflex sound upgrade EAN 0798190109220 UPC 051497113001
KT - 6042	MV-VGA	Masterflex analog VGA upgrade EAN 0798190109237 UPC 051497113018
KT - 6043	MV-MO	MASTERflex USB memory upgrade EAN 0798190109244 UPC 051497113025
KT - 6033	PoE-Set	FLEXline PoE Version Set EAN 0798190109626 UPC 051497113407
KT - 6034	PoE-Unit	FLEXline PoE Version Unit EAN 0798190109633 UPC 051497113414
KT - 9003 KT - 9002	GV5JU GV5J	Warranty extension to 5 years per UNIT Warranty extension to 5 years per SET
ADD-ONS KT - 6231	UMK-FLEX	Rack Mounting Kit for under the table for FLEXline EAN 0798190109466 UPC 051497113247
KT - 6232	RMK-FLEX-F	Rack Mounting Kit with front panel for FLEXline EAN 0798190109473 UPC 051497113254
KT - 6233	RMK-FLEX-FN	Rack Mounting Kit with front panel and Power supply EAN 0798190109480 UPC 051497113261
KT - 6234	RMK-FLEX	Rack Mounting Kit with front panel and redundand Power supply for FLEXline EAN 0798190109503 UPC 051497113285
KT - 6235	DINMK-FLEX	Din Rail Mounting for FLEXline EAN 0798190109510 UPC 051497113292
KT - 6236	VH -FLEX	Vesa Mounting Kit for FLEXline EAN 0798190109527 UPC 051497113308



point to point



switching system

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