

FLEXline master flex



Single/ Fiber redundant FULL HD KVM EXTENDER OVER IP

Masterflex single redundant ist ein hochoptimierter KVM Extender over IP für Distanzen bis 160km bei einer Auflösung von 1920x1200@60Hz und ist in Fiber erhältlich. Masterflex Extender überzeugen durch ein ultraflaches Gehäuse - 4 single Units in 1 HE (8 Videostreams), haben embedded sound und sind mit Standard-Netzwerkkomponenten kompatibel. Videosharing, USB Sharing, Multihead.

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

... Masterflex single Fiber

- DVI-D/ USB2.0 Extender over IP , redundant
- single redundant in Fiber
- max Auflösung
1920 x 1200 @60 Hz
- max Distanz 160km
- 4 single Masterflex KVM Extender in 1HE
- Sound embedded
- Full HD Videos in Echtzeit
- USB Übertragungsrate max 480Mbit/s
- nur ein Kabel für USB & Video
- DVI Verlängerung ohne Qualitätsverlust
- Feature - freeze last image
- Local/CPU -Remote/CON Monitor Output
- point to point - Matrix Switching System mit Switch (Layer3)
- Switching Manager Basis Version inkludiert

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

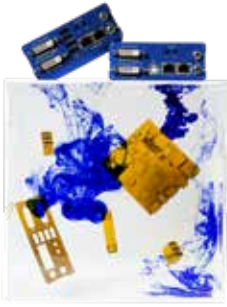
Masterflex enables transmission bandwidth to be limited in nine fixed stages. This enables controlled network utilization by reducing the operating power. Depending on the application, this can even be done without any noticeable effects (e.g. static image monitoring).



www.kvm-tec.com

V10522

Full HD
over IP



master flex

Part No.: KT- 6013



Upgrades opt

- USB Memory
- Interlaced Mode
- Sound analog
- 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

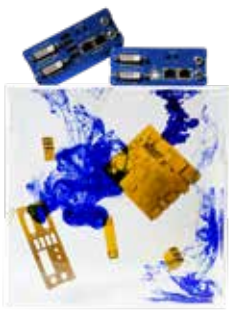
For each meter of transmission additional 5ns of signal propagation need to be added. 200km result in 1ms accordingly. Latencies caused by network switch topologies vary by type and manufacturer and overall configuration and need to be counted on top!

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



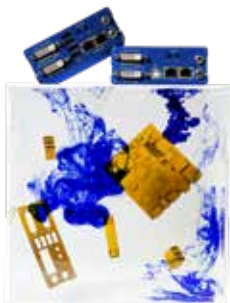


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Technical Specifications

		MV1-F Local/CPU	MV1-F Remote/CON
Interfaces	Video	1 x DVI in (no HDCP) 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 (headphone) 2 x 10 mW@32Ohm
Video	Signal type	DVI-D	DVI-D
	Resolution (digital) Signal type Resolution (analog) (opt.) Color mode	max. 1920x1200 @ 60Hz DVI-I max. 1920x1200 @ 60Hz 24bit	max. 1920x1200 @ 60Hz
Audio	Type	analogue	analogue
	Bandwidth	16bit, 44kHz, 2ch	16 bit, 44kHz, 2ch
USB	Specification	USB 2.0	USB 2.0
	Type Rate	transparent max. 480 Mbit/s mass storage devices & camera optional	transparent max. 480 Mbit/s mass storage devices & camera optional
Casing	Material	anodized aluminum	anodized aluminum
	Dimension (w x H x D)	108 x 43 x 107,5 mm	108 x 43 x 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
Network Interface		Duplex LC	Duplex LC
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	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 MV-F local (CPU)	1 x MV1-F 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	1 x DVI - DVI cable 1,8m (5.9ft)	1 x VGA-DVI cable 1,8m (5.9ft) opt 2 x Audio cable 1,8m (5.9ft) opt
		1 x USB cable 1,8m (5.9ft)	
	SFP Modules	2 x SFP Module Multimode up to 500m/1640ftduplex LC (alternative with Single mode up to 20km/12mi Item Nr 6835	2 x SFP Module Multimode up to 500m/1640ft duplex LC (alternative with Single mode up to 20km/12mi Item Nr 6835
	Mounting	4 x rubber feet	4 x rubber feet
Manual	Quickinstallation manual download: www.kvm-tec		



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Part No.: KT- 6013

Part Number & Short Description

Part No.	Short Name	Short description
KT - 6013	MV1-F	Masterflex Extender Single Fiber – Set EAN 0798190109169 UPC 051497112943
KT - 6013L	MV1-FL	Masterflex Extender Single Fiber –Local Unit /CPU EAN 0798190109176 UPC 051497112950
KT - 6013R	MV1-FR	Masterflex Extender Single Fiber –Remote Unit /CON EAN 0798190109183 UPC 051497112998
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 - 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
KT - 6831	AL-MX1-F-SM	alternativ Single Mode Module up to 20 km/12 mi



point to point



switching system

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