

master Easy

FULL HD - KVM EXTENDER OVER IP

Tune in the easy KVM World



KVM Extender over IP in single DVI, DVI-D,
KVM Extender VGA & KVM Extender USB in FIBER

masterEASY single is a highly optimized KVM Extender over IP for distances up to 160km/492ft with a resolution of 1920x1200@60Hz and is available in Fiber. masterEASY KVM Extender convince by an ultra flat housing - 4 single units in 1RU, have embedded sound and are compatible with standard Network components. Video sharing, USB sharing, multihead.

... masterEASY single FIBER

- DVI-D/ USB2.0
KVM Extender over IP
- single in Fiber
- max resolution
1920 x 1200 @60 Hz
- max distance 160km/99mi
- 4 single masterEASY KVM Extender in 1RU
- Sound embedded
- Full HD Videos in real time
- USB transmission rate max 480Mbit/s
- only one cable for USB & Video
- DVI extension without loss of quality
- Feature - freeze last image
- Local/CPU -Remote/CON Monitor Output
- Single Units :redundant for point to point , in the Matrix Switching System with Switch (Layer3)
- Upgrades: USB & Sound

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.

Bandwidth reduction

Mastereasy 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).

Infrastructure

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

Audio

The Mastereasy KVM extender provides two ways of transmitting stereo audio signals. The video embedded (included) 2-channel – L-PCM standard and unbalanced analog (Upgrade opt) bi-directional audio using 3.5mm jacks for Line input and speakers.



www.kvm-development.com

Full HD
over IP



All in one go

Matrix Switching Systems up to
56 Endpoints without user system

Bridging - Easy Switching without switch



with **Frontbridging** 2 Local EASYline Extenders can be bridged to 1 remote dual Extender (2 network sockets) & thus one or two screens can display the contents of the PCs simultaneously with different images and can be operated either right or left.

2 local single Unit + 1 remote dual Unit = Bridging on 1 or 2 screens



With **Backbridging** from one dual local extender can be shared to two single remote extenders. For all applications that require monitoring at different locations

1 dual local Unit + 2 remote Units = Bridging or Sharing on 1 or 2 screens



Easy Cross Move in Bridging Mode - Software feature

both PCs can be operated with one mouse and one keyboard

2 local Units + 1 remote Unit = Easy Cross Move with 1 keyboard & 1 mouse
In USB transparent the PC can be changed with a shortcut.
In Emulation Mode uninterrupted switching between the PCs with the mouse.

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

Technical Specifications

		ME1-F Local/CPU	ME1-F Remote/CON
Interfaces	Video	1 x DVI in (no HDCP) 1 x DVI out	1 x DVI-D out
	USB 2.0	1 x USB-B to PC	4 x USB-A (devices)
	Audio opt	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 jack (headphone) 2 x 10 mW@320hm
Video	Signal type	DVI-D	DVI-D
	Resolution (digital)	max. 1920x1200 @ 60Hz	max. 1920x1200 @ 60Hz
	Signal type	DVI-I	DVI-I
	Resolution (analog) (opt.)	max. 1920x1200 @ 60Hz	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	295 g / 0.65 lb	295 g / 0.65 lb
	SET 1895 g / 4.17 lb	shipment weight 1005g/2,21 lb	shipment weight 890 g/ 1.96lb
Power Supply	Type	wall power supply unit 12 VDC 1A redundant max 35 V barrel connector 2.1mm	wall power supply unit 12 VDC 1A redundant max 35 V barrel connector 2.1mm
Network Interface		Duplex LC	Duplex LC
Compression Factor		3.5 depending on image content	3.5 depending on image content
Power Input	Operation	6W	6W without USB devices Example: a typical keyboard has a power consumption of 0.2 W
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 ME-F local (CPU)	1 x ME1-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 USB cable 1,8m (5.9ft) 1 x VGA-DVI cable 1,8m (5.9ft) opt 2 x Audio cable 1,8m (5.9ft) opt	
	SFP Modules	2 x SFP Module Multimode up to 500m/1640ft- duplex 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	

part number & short description

part.Nr	short name	short description
8113	ME1 -F	masterEASY Extender Single – Set EAN00798190112138 UPC51497115494
8113L	ME1L-F	masterEASY Extender Single –Local Unit /CPU EAN 0798190112145 UPC 51497115500
8113R	ME1R-F	masterEASY Extender Single –Remote Unit /CON EAN 0798190112152 UPC5151497115517
6043	USB	USB Memory Upgrade EAN 0798190109244 UPC 051497113025
6041	SO	Sound Upgrade EAN 0798190109220 UPC 0798190109220
9003	GV5JU	Warranty extension flexible per UNIT
ADD-ONS 6231	UMK-EASY	Rack Mounting Kit for under the table EAN 0798190109466 UPC 051497113247
6232	RMK-EASY-F	Rack Mounting Kit with front panel for EAN 0798190109473 UPC 051497113254
6233	RMK-EASY-FN	Rack Mounting Kit with front panel and Power supply EAN 0798190109480 UPC 051497113261
6234	RMK-EASY	Rack Mounting Kit with front panel and redundand Power supply EAN 0798190109503 UPC 051497113285
6235	DINMK-EASY	Din Rail Mounting EAN 0798190109510 UPC 051497113292
6236	VH EASY	Vesa Mounting EAN 0798190109527 UPC 051497113308
7070	TNT40	Din Rail power supply DN40-12
7080	TNT100	Din Rail power supply DN-100-12



point to point



switching system

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