

# DL-VISION(M)-MC2-ARU2+CPU

KVM extenders, Article number A1110188



The KVM extenders of the DL-Vision series extend keyboard, video, and mouse signals, as well as other peripheral data (e.g., audio and USB), via a dedicated fiber connection (up to 10,000 m) uncompressed, pixel-perfect and without any latency or loss. An extender system consists of a computer module (CPU) and a console module (CON). The DL-Vision series supports DualLink-DVI for high-resolution video up to 2560 × 1600 (60 Hz) or 4096 × 2160 (30 Hz).

## SCOPE OF DELIVERY

Quantity	Description	Article number
2	PowerCable-2 Standard cable 2m	A6300057
2	DVI-D-DL-M/M-2 cable DVI-D 2m	A6300100
2	USB-AM/BM-2 cable USB 2m	A6300113
2	RS232-M/F-2 cable RS232 2m	A6300023
2	Audio-M/M-2-ferrite cable 2m	A6300083
1	19" RM-Set-436-1RU-Type2	A7000011
1	Safety instructions flyer - FCC class B	A9100371

## DETAILS

### VIDEO

- EDID data utilization from the workplace monitor
- Flexible EDID profile options for optimized monitor settings
- Resolution up to  
2560 x 1600 @ 60 Hz

### SIGNALS

- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 230,400 bps)
- USB 2.0 with Hi-Speed (separate transmission line, transparent, all USB classes)

### TRANSMISSION

- The transmission distance is up to 400 meters over fiber multimode optics, incl. transmission module(s)/SFP transceiver(s)

### DEVICE

- Improved security through physical separation between workplaces and computers
- Access to standard interfaces of the computer, with no software installation required
- MultiChannel variants (MC): Modules for multi-monitor workplaces with multi-channel video
  - MC mode uses the full bandwidth for each video channel, whereby a separate transmission line is required for each channel

### WARRANTY

- A 3-year, free of charge product guarantee
- For an additional fee guarantee extension possible

## FEATURES

### SECURITY FEATURES

- Early detection of security incidents or unusual activities through continuous monitoring via Syslog, monitoring, and SNMP
- Comprehensive rights management and user administration, allowing precise control over which user can access which resources
- Option for activatable access protection (default operating mode in matrix systems), in which authentication is required before accessing computer sources
- Support for external directory services (Active Directory, Radius, LDAP) to meet company security policies
- Freeze function: If the video signal is lost, the last displayed image is frozen and highlighted with a colored frame and timer
- Redundant internal power packs
- Redundant network interface

### OPERATION FEATURES

- Ready for operation out of the box, no additional configuration required
- Permanent keyboard/mouse emulation ensures a stable system
- Operation via multilingual on-screen display (OSD) and hotkeys
- Support of DDC/CI (Display Data Channel / Command Interface) to enable centralized software-side control of monitor settings such as brightness
- Local console at the computer module allows on-site operation, including all video channels
- Exclusive or concurrent operation: The KVM extender allows computer control both remotely and locally. When an input is detected, the extender automatically locks the competing console. The lock is lifted after a preset timeout if no further input is detected. A key combination can activate exclusive operation, immediately disabling the competing console. Another key combination restores shared control.

## TECHNICAL DATA

General	Product group	KVM extenders
	Product Family	DL-Vision
	Power Supply	Redundancy without load balancing
Input options	USB mouse	yes
	USB keyboard	yes
	PS/2 mouse	yes
	PS/2 keyboard	yes
Transmission	Number of transmission channels	3
	Redundant transmission channels	no redundant KVM transmission
	Range	400 m (50.0/125µm, OM4 - 4700MHz*km) 300 m (50.0/125µm, OM3 - 2000MHz*km) 82 m (50.0/125µm, OM2 - 500MHz*km) 66 m (50.0/125µm) 33 m (62.5/125µm, OM1 - 200MHz*km) 26 m (62.5/125µm)
	Laser class	Class 1
	Type of interface	LC-Duplex
	Wavelength	850 nm
	Medium	Fiber MM
	Data rate	10 Gbit/s
Video input	Quantity	2

	Format	DualLink DVI
	Colour depth	24 bit
	Pixel rate ca.	25 MPixel/s to 330 MPixel/s
	Vertical frequency	20 Hz to 120 Hz
	Horizontal frequency	25 kHz to 185 kHz
	Exemplary resolutions	2560 × 1600 (60 Hz) 4096 × 2160 (30 Hz) 2048 × 2160 (60 Hz) 2048 × 2048 (60 Hz) 3840 × 2160 (30 Hz)
	General Notes	Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported industry standards	Enhanced Display Data Channel (E-DDC) Display Data Channel Command Interface (DDC/CI)
Audio	Transmission type	Stereo Transparent
	Resolutions	24 bit digital
	Sampling rate	up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog
USB	Separate USB transmission port	yes
	Specification	USB 2.0
	Medium	Fiber MM

	Transmission rate	max. 480 Mbit/s (Hi-Speed)
	Range	max. 550 m
	Power (output)	500 mA (HighPower)
	USB classes	All
Serial	Standard	RS232
	Transparent transmission	yes
	Data rate	max. 230,400 bps
	Signals	TxD RxD DTR DSR RTS CTS DCD
Network	Quantity	2
	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s 1 Gbit/s
Maintenance	Update via	ConfigPanel (Network)
	Serviceport settings	230400bps (8/N/1)
Housing	Material	Anodised aluminium
	Width ca.	436 mm
	Height ca.	44 mm

	Depth ca.	284 mm
	IP protection class	IP20
	Weight ca.	3.3 kg
Operating conditions	Operating environment temperature	5 °C to 45 °C
	Operating air humidity, non-condensing	0 % to 80 %
	Area of application	Indoor use
	Maximum operating altitude above sea level	3,048 m
	Storage environment temperature	-10 °C to 55 °C
	Storage air humidity, non-condensing	0 % to 85 %
	MTBF	125,000 h at 25°C
	Conformities	CE compliant (see downloads) UKCA compliant (see downloads) FCC compliant (see manual) TAA compliant (see downloads) EAC compliant (see downloads) RoHS compliant (see downloads) WEEE (reg. no. DE30763240) REACH compliant (see downloads)
Power supply	Quantity	2
	Type	Internal
	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.7-0.3 A



	Power consumption max.	30.7 W
	Heat output max.	27.7 W

## ACCESSORY PRODUCTS

Image	Description	Article number
	<b>USB-Service-2 cable 2m</b> Cable for system updates and configuration	A6200103
	<b>PowerCable-3 Standard cable 3m</b> Cable to connect the power supply type Germany	A6300066
	<b>PowerCable-5 Standard cable 5m</b> Cable to connect the power supply type Germany	A6300065
	<b>USB-AM/BM-3 cable USB 3m</b> USB cable, Type-A Plug/Type-B Plug	A6300114
	<b>USB-AM/BM-5 cable USB 5m</b> USB cable, Type-A Plug/Type-B Plug	A6300111
	<b>RS232-M/F-5 cable RS232 5m</b> Cable to connect a serial device	A6300025
	<b>Audio-M/M-3-ferrite cable 3m</b> Audio connection cable with ferrite core	A6300118
	<b>Audio-M/M-5-ferrite cable 5m</b> Audio connection cable with ferrite core	A6300085
	<b>DVI-D-DL-M/M-3 cable DVI-D 3m</b> Single cable for connecting a digital dual-link video channel	A6300164
	<b>DVI-D-DL-M/M-5 cable DVI-D 5m</b> Single cable for connecting a digital dual-link video channel	A6300104

## RELATED PRODUCTS

Description	Article number
<b>DL-Vision(M)-MC2-ARU2-CON</b> Console module to receive Dual-Link-DVI signals via fiber multimode	A1220226

## MORE VARIANTS

Description	Article number
<b>DL-Vision(M)-AR-CPU</b> Computer module to extend Dual-Link-DVI signals via fiber multimode	A1210068
<b>DL-Vision(M)-ARU2-CPU</b> Computer module to extend Dual-Link-DVI signals via fiber multimode	A1210190
<b>DL-Vision(M)-MC2-AR-CPU</b> Computer module to extend Dual-Link-DVI signals via fiber multimode	A1210072

# CONTACT

## WE ARE HERE FOR YOU!

If you have any further questions, we are looking forward to advising you on your individual project requirements.

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