DVI-VISION-FIBER(S)-ARU-CPU-UC

KVM extenders, Article number A1110232

The matrix-compatible KVM extenders of the DVI-Vision series extend keyboard, video, and mouse signals, as well as other peripheral data (e.g., audio and USB), via a dedicated CAT or fiber connection (up to 10,000 m). An extender system consists of a computer module (CPU) and a compatible console module (CON). Computers can be controlled in near real-time – both in extender and matrix applications. The DVI-Vision series supports SingleLink DVI for digital video resolutions up to 1920 × 1200 (60 Hz). Video data is processed pixel-perfectly and offers excellent hand-eye coordination, thanks to bluedec™ – G&D's advanced, multi-stage, lossless compression technology.

SCOPE OF DELIVERY

Quantity	Description	Article number
1	PowerCable-2 Standard cable 2m	A6300057
1	DVI-D-DL-M/M-2 cable DVI-D 2m	A6300100
1	USB-AM/BM-2 cable USB 2m	A6300113
1	RS232-M/F-2 cable RS232 2m	A6300023
2	Audio-M/M-2-ferrite cable 2m	A6300083

DETAILS

VIDEO

- bluedec™ – advanced developed multi-stage compression for best video quality and practically latency-free transmission. This method enables pixel-perfect video transmission with efficient bandwidth use.
- The end devices can be flexibly combined with each other, even if they process different video signals (Mix & Match)
- EDID data utilization from the workplace monitor
- Flexible EDID profile options for optimized monitor settings
- Resolution up to
  1920 × 1200 @ 60 Hz,
  1280 × 1024 @ 85 Hz
- Resolution up to
  1920 × 1200 @ 60 Hz,
  1280 × 1024 @ 85 Hz

SIGNALS

- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 115,200 bps)
- Embedded USB 2.0 with Full Speed, transparent, all USB classes

TRANSMISSION

- The transmission distance is up to 5,000 meters over fiber singlemode 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
- The devices are compatible with the ControlCenter-Digital and ControlCenter-Compact series (matrix operation) and other end devices for computer and workplace connections (extender operation)
- Internal power pack for main power supply
- CON-2 variant: console module with two transmission lines for redundancy
  - These modules can be connected to various counterparts, such as compatible computer modules or KVM matrix switches, whereby switching is carried out via pushbuttons, hotkeys or automatically, depending on the configuration
- UC variant: computer module with two transmission lines for redundancy

  - These modules can be connected to various counterparts, such as compatible console modules or KVM matrix switches
- 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 extensioin/guarantee renewal possible

FEATURES

SECURITY FEATURES

- Console modules do not store security-relevant information such as login credentials, which could be extracted in the event of device loss
- 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
- To comply with individual password policies and improve security, password complexity can be configured system-wide
- Configurable login options, such as displaying terms of use or setting the maximum acceptable number of failed login attempts, can enhance system security
- Auto Backup Function: Automates backups at user-defined intervals and replaces manual intervention – ensuring reliable, timely data protection without the need for continuous monitoring
- Freeze function: If the video signal is lost, the last displayed image is frozen and highlighted with a colored frame and timer
- 2-Factor-Authentication (2FA) – is integrated by default in KVM extenders and enhances security by requiring a second, possession-based factor during user authentication:
  - The traditional password authentication is combined with a time-limited, single-use code (Time-Based-One-Time-Password - TOTP)
  - You can choose between using the internal authentication server provided in the device or an external directory service
  - Authenticator apps or hardware token can be used
  - This additional layer of protection prevents unauthorized access and ensures the highest level of security, particularly in sensitive IT environments

OPERATION FEATURES

- Ready for operation out of the box, no additional configuration required
- Permanent keyboard/mouse emulation ensures a stable system
- Compatibility with special USB-HID input devices
- Operation via multilingual on-screen display (OSD) and hotkeys
- Configuration and update via the multilingual HTML5 web interface “Config Panel 21” (Java-free)
- 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.

EXTENSIONS

DEVICE

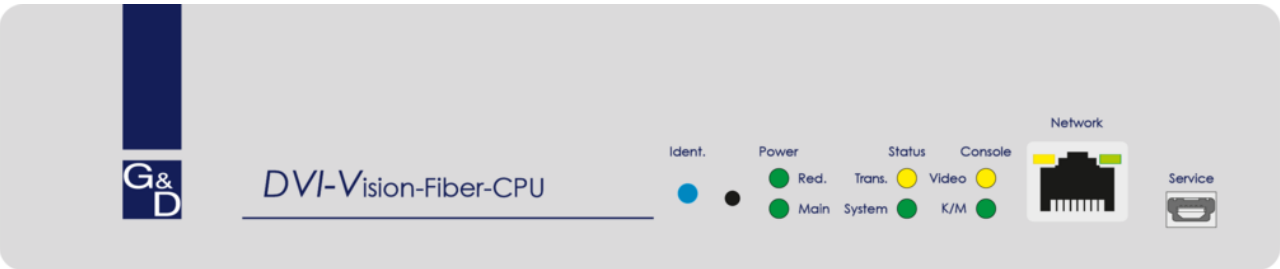
- External power supply via external 12V power pack or G&D-MultiPower, providing a central and redundant power supply
- Device mounting via RackMount sets, TableMount sets or other mounting tools

SYSTEM EXTENSION

- You can integrate the matrix-compatible extenders into a complete installation with a ControlCenter-Compact or ControlCenter-Digital, even at a later point in time. This provides you with even greater flexibility through the possibility of distributed access – and the existing components can continue to be used.

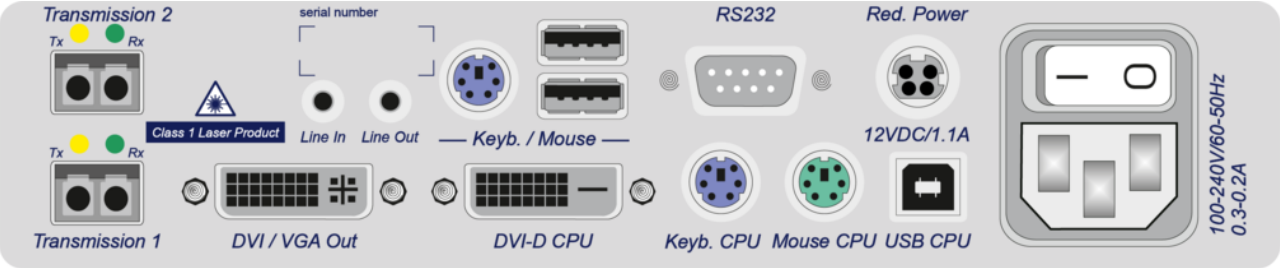
INTERFACES

FRONT



Aperture designation	Design	Description
Network	RJ45 socket	Network connection
Service	Mini USB socket	Connection for service purpose

BACK



Aperture designation	Design	Description
Transmission 1	LC Duplex socket	Data transmission between modules
Transmission 2	LC Duplex socket	Data transmission between modules
DVI / VGA Out	DVI-I jack	Connecting a monitor
DVI-D CPU	DVI-D jack	Connection to the computer
Line In	3,5-mm jack plug	Connection to the computer
Line Out	3,5-mm jack plug	Connection to the computer
Keyb./Mouse	PS/2 jack	Connection of a keyboard / mouse
Keyb./Mouse	USB A socket	Connection of a keyboard / mouse
Keyb. CPU	PS/2 jack	Connection to the computer
Mouse CPU	PS/2 jack	Connection to the computer
RS232	D-Sub 9 socket	Serial data transmission
USB CPU	USB B socket	Connection to the computer
Red. Power	Mini DIN 4 socket	Redundant power supply
Main Power	IEC plug (IEC-320 C14)	Power supply

TECHNICAL DATA

General	Product group	KVM extenders KVM matrix systems
Input options	USB mouse	yes
	USB keyboard	yes
	PS/2 mouse	yes
	PS/2 keyboard	yes
Transmission	Number of transmission channels	2
	Redundant transmission channels	Redundant KVM transmission available
	Range	5000 m (9/125µm, OS1)
	Laser class	Class 1
	Type of interface	LC-Duplex
	Wavelength	1310 nm
	KVM matrix system component	Computer module
	Medium	Fiber SM
	Data rate	2.5 Gbit/s
Video input	Number of video channels	1
	Format	Singlelink DVI
	Colour depth	24 bit
	Pixel rate	ca. 25 MHz to ca. 165 MHz
	Vertical frequency	24 Hz to 120 Hz

	Horizontal frequency	25 kHz to 130 kHz
	Exemplary resolutions	1920 × 1200 (60 Hz) - Full HD / WUXGA 1920 × 1080 (60 Hz) - Full HD / WUXGA 1600 × 1200 (60 Hz) - Full HD / WUXGA 1280 × 1024 (85 Hz) - Full HD / WUXGA Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported interlace resolutions	1080i (60 Hz) 1080i (50 Hz) 576i (50 Hz) 400i (60 Hz)
Video output	Number of video channels	1
	Format	Singlelink DVI
	Colour depth	24 bit
	Pixel rate	ca. 25 MHz to ca. 165 MHz
	Vertical frequency	24 Hz to 120 Hz
	Horizontal frequency	25 kHz to 130 kHz
	Exemplary resolutions	1920 × 1200 (60 Hz) - Full HD / WUXGA 1920 × 1080 (60 Hz) - Full HD / WUXGA 1600 × 1200 (60 Hz) - Full HD / WUXGA 1280 × 1024 (85 Hz) - Full HD / WUXGA Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported interlace resolutions	400i (60 Hz) 576i (50 Hz) 1080i (50 Hz) 1080i (60 Hz)
	Note	Only the listed Interlace formats are supported.

Audio	Transmission type	Stereo Transparent
	Resolutions	24 bit digital
	Sampling rate	up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog
USB	Specification	USB 2.0
	Medium	Embedded
	Transmission rate	16 Mbit/s (app. Full Speed)
	Range	max. 5000 m
	USB classes	All
Serial	Standard	RS232
	Transparent transmission	yes
	Data rate	max. 115200 bps
	Signals	TxD RxD DTR DSR RTS CTS DCD
Network	Medium 1	CAT5 CAT6 CAT7
	Data rate 1	10 MBit/s 100 MBit/s

Maintenance	Update via	ConfigPanel (Network)
	Serviceport settings	115200bps (8/N/1)
Housing	Material	anodised aluminium
	Width	ca. 210 mm
	Height	ca. 44 mm
	Depth	ca. 210 mm
	IP protection class	IP20
	Weight	ca. 1.36 kg
Operating conditions	Operating temperature	5 °C to 45 °C
	Operating air humidity	20 % to 80 %, non-condensing
	Area of application	Interior
	Maximum operating altitude	3048m above sea level
	Storage temperature	-20 °C to 60 °C
	Storage air humidity	15 % to 85 %, non-condensing
	MTBF	200000 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	Input voltage	100-240 VAC

	Input frequency	60-50 Hz
	Current consumption	0.3-0.2 A
	Power consumption max.	13.4 W
	Heat output max.	10.4 W
Power supply 2	Input voltage	12 VDC
	Current consumption	1.1 A
	Power consumption max.	11.5 W
	Heat output max.	8.5 W

MORE VARIANTS

Description	Article number
DVI-Vision-Fiber(S)-AR-CPU Computer module to extend single link DVI signals via fiber singlemode	A1110173
DVI-Vision-Fiber(S)-AR-CPU-UC Splitter computer module for transmission of single link DVI signals to 2 different counterpart stations (extenders or matrix switches) via fiber singlemode	A1110231
DVI-Vision-Fiber(S)-ARU-CPU Computer module to extend single link DVI signals via fiber singlemode	A1110174
DVI-Vision-Fiber(S)-ARU2-CPU Computer module to extend single link DVI signals via fiber singlemode	A1110176
DVI-Vision-Fiber(S)-MC2-AR-CPU Computer module to extend single link DVI signals via fiber singlemode	A1210177
DVI-Vision-Fiber(S)-MC2-ARU-CPU Computer module to extend single link DVI signals via fiber singlemode	A1210179
DVI-Vision-Fiber(S)-MC2-ARU2-CPU Computer module to extend single link DVI signals via fiber singlemode	A1210178
DVI-Vision-Fiber(S)-MC3-AR-CPU Computer module to extend single link DVI signals via fiber singlemode	A1310059
DVI-Vision-Fiber(S)-MC3-ARU-CPU Computer module to extend single link DVI signals via fiber singlemode	A1310060
DVI-Vision-Fiber(S)-MC3-ARU2-CPU Computer module to extend single link DVI signals via fiber singlemode	A1310061
DVI-Vision-Fiber(S)-MC4-AR-CPU Computer module to extend single link DVI signals via fiber singlemode	A1410176
DVI-Vision-Fiber(S)-MC4-ARU-CPU Computer module to extend single link DVI signals via fiber singlemode	A1410178
DVI-Vision-Fiber(S)-MC4-ARU2-CPU Computer module to extend single link DVI signals via fiber singlemode	A1410177

CONTACT

WE ARE HERE FOR YOU!

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

TECHNICAL SALES

Tel.: +49 271 23872-333
Fax: +49 271 23872-120
E-Mail: sales@gdsys.com

HEADQUARTERS

Guntermann & Drunck GmbH Systementwicklung
Obere Leimbach 9 | 57074 Siegen | NRW |
Deutschland

Tel.: +49 271 23872-0
Fax: +49 271 23872-120
E-Mail: sales@gdsys.com

US OFFICE

G&D North America Inc.
4540 Kendrick Plaza Drive | Suite 100
Houston, TX 77032 | United States

Tel.: +1-346-620-4362
E-Mail: sales.us@gdsys.com

MIDDLE EAST OFFICE

Guntermann & Drunck GmbH
Dubai Studio City | DSC Tower
12th Floor, Office 1208 | Dubai, UAE

Tel.: +971 4 5586178
E-Mail: sales.me@gdsys.com

APAC OFFICE

Guntermann & Drunck GmbH
60 Anson Road #17-01
Singapore 079914

Tel.: +65 9685 8807
E-Mail: sales.apac@gdsys.com